

DOCUMENT RESUME

ED 224 277

EC 151 024

TITLE An Analysis of the Impact of the Handicapped Children's Early Education Program. Final Report.
INSTITUTION Littlejohn (Roy) Associates, Inc., Washington, D.C.
SPONS AGENCY Special Education Programs (ED/OSERS), Washington, DC.
PUB DATE Nov 82
CONTRACT 300-81-0661
NOTE 165p.
PUB TYPE Reports - Evaluative/Feasibility (142)
EDRS PRICE MF01/PC07 Plus Postage.
DESCRIPTORS *Cost Effectiveness; *Disabilities; *Early Childhood Education; *Outcomes of Education; Program Descriptions; *Program Effectiveness; *Program Evaluation; Validated Programs
IDENTIFIERS *Handicapped Childrens Early Education Program

ABSTRACT

The report provides an analysis of the impact of the Handicapped Children's Early Education Program (HCEEP) during the past decade. Following an executive summary, Chapter 1 provides an historical overview of the HCEEP and information on previous evaluations of the program. The second chapter describes the study's work scope and methodological approach. The next chapter provides a detailed discussion of the input and output variables for the 280 HCEEP demonstration projects. The fourth chapter gives a description of a random sample of 20 HCEEP projects. Exemplary HCEEP programs whose products and practices have been approved for dissemination by the Joint Dissemination Review Panel are described in chapter 5. The final chapter presents a summary of the findings and conclusions of the study. Among 13 major findings of the study are the following: 80% of the 280 projects are continuing to serve children independent of HCEEP funding; more than 30,200 children were served in continuation projects at no cost to HCEEP; replication programs served 107,850 children; for every HCEEP dollar expended in programming, \$218.37 was generated in programming for children and their families; 55% of children leaving HCEEP were placed in integrated settings with non-handicapped children; and more than 3,000 products were developed by HCEEP projects and disseminated, many through commercial publishers. (DB)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED224277

This document has been reproduced as
received from the person or organization
originating it.
Minor changes have been made to improve
reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

AN ANALYSIS OF THE IMPACT
OF THE HANDICAPPED CHILDREN'S
EARLY EDUCATION PROGRAM
(Final Report)

Prepared For:

SPECIAL EDUCATION PROGRAMS
U.S. DEPARTMENT OF EDUCATION

Under Contract Number 300-81-0661

Prepared By:

ROY LITTLEJOHN ASSOCIATES, INC.
1331 "H" Street, N.W.
Suite 400
Washington, D.C. 20005

November, 1982

TABLE OF CONTENTS

	<u>PAGE</u>
PREFACE.....	i
EXECUTIVE SUMMARY.....	ES-1
CHAPTER ONE: INTRODUCTION.....	1
A. Historical Overview of the Handicapped Children's Early Education Program.....	1
B. Previous Evaluations of the HCEEP.....	7
CHAPTER TWO: PRESENT IMPACT STUDY.....	10
A. Scope of Work.....	10
B. Methodological Approach.....	11
CHAPTER THREE: HCEEP ANALYSIS.....	17
A. Input Analysis.....	17
B. Output Analysis.....	36
CHAPTER FOUR: RANDOM SAMPLE OF HCEEP DEMONSTRATION PROJECTS.....	70
A. Purpose and Selection Process.....	70
B. Site Visit Procedure.....	70
C. Input Analysis of Twenty Randomly Selected HCEEP Demonstration Projects.....	76
D. Output Analysis of Twenty Randomly Selected HCEEP Demonstration Projects.....	86
CHAPTER FIVE: HCEEP PROJECTS APPROVED BY THE JOINT DISSEMINATION REVIEW PANEL.....	104
A. Purposes and Procedures of The Joint Dissemination Review Panel.....	104
B. Twenty-One HCEEP Projects Approved by The JDRP.....	107

	<u>PAGE</u>
CHAPTER SIX: SUMMARY AND CONCLUSIONS.....	146
A. Summary.....	146
B. Conclusions.....	147

LIST OF FIGURES

	<u>PAGE</u>
Figure 1: Handicapped Children's Early Education Program.....	3
Figure 2: Graph of Children Served in Demonstration and Continuation Projects.....	42

LIST OF TABLES

Table 1: Type of Agency Sponsors for HCEEP Demonstration Projects for the Period 1969-1980.....	18
Table 2A: Geographic Distribution of HCEEP Demonstration Projects (1969-1980).....	20
Table 2C: Three Year Demonstration Projects Completed between 1969 and 1980.....	21
Table 2B: Three Year Demonstration Projects Completed by 1980..	22
Table 3: Distribution of HCEEP Demonstration Projects Urban/Rural Areas for the Period 1969-1980.....	24
Table 4: Service Delivery Settings of HCEEP Demonstration Projects for the Period 1969-1980.....	26
Table 5: Handicaps of Children Served by HCEEP Demonstration Projects in 1979-1980.....	28
Table 6: Children Served by HCEEP Demonstration Projects for the Period 1969-1980.....	31
Table 7: Age Range of Children Served by HCEEP Demonstration Projects for the Period 1969-1980.....	32
Table 8: Demonstration Funds 1969-1980.....	34
Table 9: Average Demonstration Funding (for three years) for the Period 1969-1980.....	35
Table 10: Placements and Settings of Children Who Left HCEEP Demonstration Projects.....	37

	<u>PAGE</u>
Table 11: Rating of Child Progress in Relation to Their Peers...	38
Table 12: Rating of Child Progress in Relation to Expectation of Placement Agency.....	39
Table 13: Children Served in Demonstration and Continuation Projects 1969-1980.....	41
Table 14: Geographic Distribution of HCEEP Outreach Projects (1969-1980).....	44
Table 15: Three-year Demonstration Projects Completed and Receiving Outreach Grants (1969-1980).....	45
Table 16: Outreach Funding 1969-1980.....	47
Table 17: Average Outreach Funding for the Period 1972-1980.....	49
Table 18: Total Demonstration and Outreach Expenditure 1969-1980	50
Table 19: HCEEP Mean Agency Funding Level.....	52
Table 20: Comparison of Demonstration and Present Models of Six Continuation Projects.....	72
Table 21: Grants Received from the HCEEP and Other Components of the Department of Education By Six Continuation Projects.....	73
Table 22: Comparison of Demonstration with Replication Model of Six Replication Projects.....	75
Table 23: Agency Sponsors for Twenty Randomly Selected HCEEP Demonstration Projects.....	77
Table 24: Geographic Distribution of Twenty Randomly Selected HCEEP Demonstration Projects.....	78

	<u>PAGE</u>
Table 25: Urban/Rural Distribution of Twenty Randomly Selected HCEEP Demonstration Projects.....	79
Table 26: Service Delivery Settings of Twenty Randomly Selected HCEEP Demonstration Projects.....	80
Table 27: Handicaps Addressed by Twenty Randomly Selected HCEEP Demonstration Projects.....	81
Table 28: Treatment Approaches Used by Twenty Randomly Selected HCEEP Demonstration Projects.....	82
Table 29: Children Served by Twenty Randomly Selected HCEEP Demonstration Projects.....	83
Table 30: Age Range of Children Served by the Twenty Randomly Selected HCEEP Demonstration Projects.....	84
Table 31: Funds Allocated to the Twenty Randomly Selected HCEEP Demonstration Projects.....	85
Table 32: Projects Receiving Local Continuation Funds of Twenty Randomly Selected HCEEP Demonstration Projects.....	87
Table 33: Children Served in First Year Continuation by Sixteen Agencies Continued.....	88
Table 34: First Year Funding for Sixteen Continuation Agencies..	89
Table 35: Projects Receiving Outreach Funding of Twenty Randomly Selected Demonstration Projects.....	91
Table 36: Number of Replications Listed by Twenty Randomly Selected Demonstration Programs.....	95
Table 37: Summary of Basic Facts About the Forty Replications of the Twenty Randomly Selected Demonstration Projects....	97
Table 38: Factors Listed as Critical to Decision to Replicate Demonstration Model by Forty Replication Programs....	98
Table 39: Categories of Institutional Change Reported by Twenty Randomly Selected Demonstration Projects.....	100
Table 40: Categories of Unforeseen Outcomes Reported by Twenty Randomly Selected Demonstration Projects.....	102
Table 41: Grants Received from the HCEEP and Other Components of the Department of Education.....	141

PAGE

Table 42: Basic Facts About Programs Operated by Two JDRP Projects.....	142
Table 43: Children Served and Funding Sources of Replication Programs.....	145

PREFACE

This report is intended to analyze the impact of the Handicapped Children's Early Education Program (HCEEP) for the past decade. The analysis focuses on several aspects of the HCEEP: those variables controlled by the HCEEP in setting up the conditions by which the program operates (input factors), and those variables which occur as a consequence of the projects funded by the HCEEP (output factors).

The contents of the report are as follows: Chapter One, the Introduction, provides a historical overview of the HCEEP and information on previous evaluations of this program. Chapter Two, Present Impact Study, describes the study's work scope and methodological approach. Chapter Three, HCEEP Analysis provides a detailed discussion of the input and output variables for the 280 HCEEP demonstration projects. Chapter Four, Random Sample of HCEEP Demonstration Projects, provides a detailed description of 20 HCEEP projects. Chapter Five, HCEEP Projects Approved by The Joint Dissemination Review Panel, provides descriptions of exemplary programs whose products and practices have been approved for dissemination by the U.S. Department of Education. The final chapter, Chapter Six, presents a brief summary of the findings and draws conclusions based on these findings.

This report attempts to contribute to awareness and understanding of the HCEEP's goals and impact. Moreover, it measures the effectiveness of this program both in terms of its accomplishments and products.

The principal authors of the report are:

Juanita Reaves, Ph.D.

James Burns, Ph.D.

These senior staff members of Roy Littlejohn Associates, Inc. wish to acknowledge the assistance and cooperation of the Special Education Programs personnel, especially the Project Officer, Jane DeWeerd.

We offer a special thanks to the HCEEP Demonstration Projects which responded to the survey and which were visited, the Replication Programs which responded to the survey and which were visited, the follow-up programs which responded to the survey, and the Joint Dissemination Review Panel approved Projects which were visited.

EXECUTIVE SUMMARY

Analysis of the Impact of the Handicapped Children's Early Education Program

The purpose of this study was to analyze the impact of the Handicapped Children's Early Education Program over the last decade. The study was carried out by Roy Littlejohn Associates, Inc. under a small business contract. The Statement of Work for this study contains a concise overview of the Handicapped Children's Early Education Program. It pointed out that:

"...it is estimated that there are one million handicapped children of preschool age in the United States and 75% of these children are not receiving the education and related services they need. The Congress recognized the nation's responsibility to these children and their families and that attention to needs during the early and formative years is critically important if a child's potential for a more normal and productive life in later years is not to be impaired. In 1968, the Congress enacted legislation to establish the Handicapped Children's Early Education Program. The purpose was to support experimental/ demonstration activities which pioneered innovative and effective means of serving preschool handicapped children and their families and resulted in models for others to replicate. Projects representing a wide variety of handicaps and environmental settings were funded. During the three-year phase experimental models were developed and their effectiveness demonstrated. Following this phase, projects could become eligible to apply to engage in outreach activities. In order to receive further support, each outreach project was required to provide evidence of funding from sources other than the Handicapped Children's Early Education Program to support the continuation of direct services to preschool handicapped children and their families. Continuing services at the original project sites were maintained while similar kinds of services in other locations were being developed through the use of outreach funds, (i.e. replication)."

The Handicapped Children's Early Education Program (HCEEP) was established to support locally designed projects to serve young children with handicaps and their families and to provide information on effective practices which would be used by others facing similar needs.

The objectives of this impact study were to:

1. Determine the extent of (a) continuation of projects from non-HCEEP funds after the end of the three-year period of Federal support for demonstration; (b) replication of models developed by the program; and (c) placement of children graduating from the projects.
2. Analyze factors affecting the projects' impact.
3. Collect descriptive and analytical information on some of the exemplary projects with the greatest impact.

Surveys and site visitation were used to obtain data on the impact of the 280 projects which completed the three-year period of demonstration prior to 1981, some of which also carried out outreach activities in response to requests from other agencies. The major findings of this study are that:

- Eighty percent (80%) of the 280 projects are still continuing to serve children independent of HCEEP funding.
- More than 30,200 children have been served in continuation projects at no cost to the HCEEP.
- The study identified 2,157 replications; 1,991 as a result of outreach activities and 166 from projects in the demonstration phase.
- For every HCEEP dollar expended in programming, \$18.37 has been generated in programming for children and their families.

- Replication programs served 107,850 children.
- For each child served directly in the demonstration projects, 6.4 children received services through continuation of demonstration projects and through replication of projects.
- For each demonstration project, an average of 33 children per year were served through other funds.
- Projects have been active in every state and in several territories in urban and rural areas as specified by the legislation.
- Fifty-five percent (55%) of the children who leave HCEEP demonstration projects are placed in integrated settings with non-handicapped children which is less expensive than more specialized placements.
- Sixty-seven percent (67%) of the children who leave HCEEP demonstration projects perform in the average and above average range in relation to their peers, according to staff of the regular and special education programs to which they graduate.
- Twenty-one HCEEP Projects have been approved for dissemination by the Joint Dissemination Review Panel of the Department of Education on the basis of evidence of effective programming and cost of replication.
- More than 3,000 products have been developed by HCEEP projects and widely disseminated, many through commercial publishers.
- Extensive training has been requested by and provided to personnel of other agencies.

CHAPTER ONE: INTRODUCTION

A. Historical Overview of the Handicapped Children's Early Education Program

In recognition of the scarcity of services for young children with handicaps and their parents and the critical need for prototype projects, Congress enacted the Handicapped Children's Early Education Assistance Act in 1968. The Act (P.L. 90-538) authorized the Commissioner of Education to make contracts and grants to public and private agencies and organizations "for the establishment of experimental preschool and early education programs for the handicapped children from birth to age eight which show promise of developing comprehensive and innovative approaches for meeting the special problems of such children." The programs were to be distributed throughout the Nation, and carried out in both urban and rural areas.

The legislation had strong bipartisan support and the hearings carried out prior to passage showed the "seed money" intent. It was pointed out that,

"This program should be viewed as a model demonstration program and not as a service program; however, programs that show promise of providing meaningful answers for education of handicapped children should at the appropriate time be evaluated for permanent legislative approval." (Carl Perkins, Committee on Education and Labor, Report No. 1793, 90th Congress, 2nd session, to accompany H.R. 18763, with Wilfred H. Rommel to the President, September 23, 1968, Reports on Legislation, Box 52, 9/20/68-10/4/68, Lyndon Baines Johnson Library).

The major purposes of the Act are as follows:

- ° To design experimental approaches to meet the special needs of young children with handicaps.

- To develop programs to facilitate the intellectual, mental, social, physical and language development of the children.
- To encourage parental participation in the development and operation of programs.
- To acquaint the community with the problems and potential of handicapped young children.
- To coordinate with the local school system in the community being served.
- To evaluate the effectiveness of the programming. The Act authorizes the Commissioner to provide either directly or through contract with independent organizations for a thorough and continuing evaluation of the effectiveness of the program.

Components of the Handicapped Children's Early Education Program

The passage of the Handicapped Children's Early Education Assistance Act led to the establishment of the Handicapped Children's Early Education Program (HCEEP), sometimes called the First Chance Network. Its purpose is to make visible a variety of approaches to providing services for children with handicaps from birth to age 8 with emphasis on birth to age 6, and their families.

The HCEEP has five major components: demonstration, technical assistance, outreach, state implementation grants, and early childhood research institutes. These components are complementary to one another.

FIGURE 1.

Figure 1

HANDICAPPED CHILDREN'S EARLY EDUCATION PROGRAM

PURPOSE: TO ASSIST IN DEVELOPING AND IMPLEMENTING INNOVATIVE EXPERIMENTAL PROGRAMS FOR YOUNG HANDICAPPED CHILDREN (BIRTH TO EIGHT YEARS) AND THEIR FAMILIES

Projects	Demonstration	Outreach	State Implementation	Early Childhood Institutes	Technical Assistance Centers
Goals	Development of Exemplary Models; Demonstration and Dissemination	Stimulation of Increased and High Quality Services	Implementation of Early Childhood State Plans	Long Term Investigation of Selected Aspects of Early Education for Handicapped Children	Technical Assistance To Demonstration Projects and State Implementation Projects
Activities	<ul style="list-style-type: none"> • Services to Children • Services to Parents • Staff Development • Program Evaluation • Demonstration and Dissemination 	<ul style="list-style-type: none"> • Broad Dissemination of Information • Product Development and Distribution • Stimulating Additional Services • Training Consultation • State Involvement & Coordination 	Assessment of Needs Training Data Collection and Analysis	Research into Direct Application of Early Education Programs in Typical Settings	Assessment of Needs Program Planning Expert Consultation Evaluation
Eligible Parties	Public & Private, Non-Profit Agencies	Public & Private, Non-Profit Agencies	State Education Agencies	Public & Private, Non-Profit Agencies	Public & Private Non-Profit Agencies
Type of Funding	Grant	Grant	Grant	Contract	Contract
Funding Period	3 Years Annual Renewal	1 or 2 Years Annual Renewal	1 or 2 Years Annual Renewal	5 Years Annual Renewal	3 Years Annual Renewal

Demonstration. The Demonstration projects form the base of the HCEEP.

These projects are funded for a three-year period and are designed to be suitable for adoption or adaption by others. Each project is required to develop the following components.

- Services to children, both directly within the project site and through use of supplementary services;
- Active parent/family participation;
- Inservice training;
- Assessment of child progress;
- Evaluation of the project's effectiveness in meeting its objectives;
- Demonstration to the professions and to the general public;
- Coordination with the public schools and other agencies; and
- Dissemination of information.

The models to be developed and demonstrated are to be replicable by others. Each project is expected to obtain funds from other sources at the end of the three-year Federally supported demonstration period to continue the direct services to children and their families. The Handicapped Children's Early Education Program does not fund services for children after the three-year demonstration period. Demonstration projects which do obtain continuation support from State or local funds are eligible to compete for additional second-phase funding from the program to carry out outreach activities.

Outreach activities emphasize stimulating and responding to training requests from other agencies, replicating components of the demonstration model and providing consultation to enable other agencies to provide appropriate services. The projects' role is catalytic and the HCEEP's aim is to help meet the U.S. Department of Education's goal of providing full services for preschool handicapped children.

Outreach

Projects which have completed the three year period of federal support for demonstration may apply for funding to enter a new phase, outreach. The criteria are: 1) evidence of continuation from other sources of services for children which were developed during the demonstration period, 2) requests from other agencies wishing their help, 3) evidence of some prior experience in assisting other agencies and 4) the availability of materials needed to work with other agencies. Outreach projects work to develop increased and improved services based on the model developed during the demonstration period. Outreach projects provide training; assist in the establishment of replication sites (programs based on the model developed during the demonstration period); provide technical assistance in a variety of areas including assessment, program management and evaluation, and disseminate information. Outreach is an optional component and not all projects wish or are expected to apply for support to work with other agencies.

State Implementation Grants. The third component is the State Implementation Grant (SIG). This component is designed to assist State Education Agencies in planning for the expansion of early intervention services for handicapped children. SIG grants assist states to develop and implement long-term, comprehensive, full-service plans for the preschool education of the handicapped. Toward this purpose, SIG grants support such activities as convening planning groups, disseminating established plans, developing preschool program standards and guidelines, and developing and supporting consortia.

These grants provide administrative resources rather than direct services to children. The SIGs can assist states by making available special early education personnel to do needs and resource assessment, detailed planning and state level coordination of services among agencies.

Technical Assistance. The next component of the HCEEP is technical assistance. Both Technical Assistance Development System (TADS) and Western States Technical Assistance Resource (WESTAR) work with Demonstration projects and SIGs to develop quality programming by helping them meet their objectives and needs. These agencies have pioneered procedures for the systematic delivery of technical assistance, and they are active in information dissemination.

Early Childhood Research Institutes. Early Childhood Research Institutes, a joint effort with the Research Projects Branch of Special Education Programs, were first funded in 1978. The four institutes conduct long-term studies to add to the knowledge of such topics as social, emotional, physical, cognitive and behavioral aspects of the child; theories and methods of intervention; parent-child interaction; and assessment approaches.

Projects within these five components of HCEEP seek practical solutions to complex problems. The projects in each component find effective ways to work with young handicapped children and their families and share the results of their work with others. This impact study is concerned with the impact of the two major components, demonstration and outreach, since the program's inception. Figure 1 presents a summary of the HCEEP program components

B. Evaluations of the HCEEP

The legislation which initiated the HCEEP required evaluation of the program. Two comprehensive evaluations have been conducted, one by ABT Associates and one by the Battelle Memorial Institute.

ABT Associates. In 1972, ABT Associates conducted a study to identify 18 projects which had exemplary features. The scope was nationwide and the

projects were to be working in one of four priority areas of interest to the U.S. Office of Education, including career education, research and early childhood education. After site visiting many projects, ABT selected 8 of the projects developed with funding from the HCEEP, an unusually high proportion of the 18 projects and the largest number from any of the programs which were studied.¹

Battelle Institute Study. In 1974, the Battelle Institute, Columbus, Ohio, conducted a study of the HCEEP program to assess children's progress, the status of "graduates" of the projects, parent participation and replication by other agencies. The contractor tested 129 randomly selected children in 29 projects and assessed progress in the personal-social, motor, cognitive and communication domains. Selected major findings are summarized below. The Final Report showed that within all handicapping conditions children made one and one-half to two times greater gains than they would have been expected to make without the benefit of the project experiences; in some cases, as with EMR children in the personal-social domain, the gains were even larger.

Parental satisfaction was also evaluated. Ninety-seven percent of parents

¹ Exemplary Programs for the Handicapped (1973), Contract No. OEC-O-72-5182. ABT Associates, Inc., Human Development Area, 55 Wheeler Street, Cambridge, MA 02138.

perceived positive changes or improvements in their children which they attributed to the project. The Battelle study also looked at the placement of graduates leaving the projects, since one of the major goals of early childhood projects is to prepare children to enter regular placements whenever possible. The Battelle study found that 74 percent of the children in the sample were placed in public school settings; 64 percent of the graduates studied were in regular placement, with half of them receiving ancillary services.²

² Evaluation of Handicapped Children's Early Education Program (1976), Contract No. OEC-O-74-0402. Battelle Institute, Center for Improved Education, 505 King Avenue, Columbus, OH 43201. (ERIC No. ED125-165).

CHAPTER TWO: PRESENT IMPACT STUDY

A. Scope of Work

Background

During August, 1980, the Office of Special Education met with small business firms to discuss their qualifications and experience to conduct a proposed procurement entitled "Analysis of Impact of Handicapped Children's Early Education Program (HCEEP)." Following these meetings, selected firms were asked to submit a proposal. On February 17, 1980, a contract was awarded to Roy Littlejohn Associates, Inc. to conduct a 15-month study of the impact of the HCEEP for the 1969-1980 decade.

Study Objectives

The overall objectives of the study are to:

1. Determine the extent of (a) continuation of projects after the end of the three-year period of Federal support; (b) replication of models developed by the program and (c) placement of children graduating from the projects.
2. Analyze factors affecting the projects' impact.
3. Collect descriptive and analytical information on some of the exemplary projects with the greatest impact.

B. Methodological Approach

The investment in demonstration and outreach projects was considered as "input" and compared to the return in continuation of services and replication or "output".

Sample

The first step in carrying out the study objectives was the development of the list of projects funded by the HCEEP from 1969 through 1979-80 which had completed the three year demonstration phase prior to September, 1980. Projects which were discontinued before completing the demonstration period or those entering demonstration later than 1978 were therefore not included in this study.

Data Collection (Record Reviews, Surveys, Site Visits)

A total of 280 projects were identified for inclusion in this study. These projects were contacted and asked to respond to a survey designed for the study.

Because of the length of the period being studied, it was necessary to make extra efforts to locate some of the projects' former staff members or persons in the community who were familiar with the projects. Up to three mailings were made to projects which did not respond to the initial survey and these were followed in some instances with phone calls. A number of directors

of former demonstration projects were located in other states, and in only a few instances was it impossible to find anyone familiar with the project.

Survey Instruments

The second phase of the study involved developing the data gathering instruments. Three survey instruments were developed: 1) the HCEEP Impact Survey, 2) the HCEEP Follow-up Survey, and 3) the HCEEP Survey for Replication Programs. All instruments were approved by the Office of Management and Budget (OMB Clearance) and the Federal Education Data Acquisition Council (FEDAC clearance). No material contained names or other identifying information about individual children and confidentiality was assured.

a. Impact Survey. The HCEEP Impact Survey was completed by the demonstration projects funded by the HCEEP which completed the three-year demonstration period. The survey was designed to yield several types of information: 1) information about the three-year demonstration period, 2) information about the continuation of services following the third year of demonstration, 3) information about the placement of children who left the projects, 4) information about replications of the demonstration model, and 5) indicators of impact and unexpected outcomes.

b) Follow-up Survey. The HCEEP Follow-up Survey was completed by agencies which received students from projects supported by the

HCEEP. The survey was designed to obtain information about: 1) the type of placement, 2) maintenance of regular placements (non-handicapped children), 3) special resource help required, and 4) the progress of children at placement agencies.

c. Replication Survey. The HCEEP Survey for Replication Programs was completed by agencies which were reported as replicating all or major components of the demonstration models supported by the HCEEP. The survey was designed to obtain information about: 1) type of agency or site replicating the demonstration project model, 2) components of the model being replicated, 3) characteristics of the populations being served, 4) factors related to the decision to replicate the model, 5) factors related to their ability to carry out the replication of the model, 6) problems encountered in implementing the model, and 7) adaptations made in the utilization of the model.

Site Visits

The third source of data was observations from site visits. From a randomly selected group of 20 of the 280 demonstration projects, reported continuation and replication sites were identified in order to verify basic information.

a. Continuation Sites. Continuation sites are defined as projects

developed during the demonstration period and continuing to serve children at no cost to the HCEEP. Six continuation sites were randomly selected from the group of 20 projects and visited in order to document their history from the time they became a HCEEP grantee to the present. Information also was obtained in regard to: 1) whether the model is still fundamentally like their project description in the abstract for the project or in the application during the demonstration phase, and 2) whether the model is still serving children and if so, how many children are being served.

b. Replication Sites. Survey information was used to determine whether 40 of the sites listed as replications of the 20 projects consider themselves to have replicated all or major components of one of the 20 demonstration models. Six replication sites were randomly selected from the replications listed by the 20 projects and site visited to document the replication process and to learn 1) whether the services provided are fundamentally like those described in the abstract for the demonstration model or in the proposal during the demonstration phase, and 2) the number of children being served in the replication sites.

C. Exemplary Projects

The final phase of the study involved gathering information about some of the exemplary projects with the greatest impact. Projects which present both evidence of effective programming and information on costs of using the programming in other sites can be approved for dissemination by the Joint Dissemination Review Panel (JDRP) of the Department of Education. Descriptive and analytical material about these projects was collected.

From the list of 21 HCEEP projects that have been awarded exemplary status by the JDRP, two were randomly selected for site visitation. The two JDRP site visits were made in order to document basic facts about the programs: 1) confirming that the models are functioning as described in Educational Programs That Work, published by the National Diffusion Network (NDN), 2) determining the number of children being served by continuation funds, and 3) determining the amount of support for continuation.

From the replication sites listed by the two JDRP projects, 5 replication sites were randomly selected. These 5 replication sites were contacted in order to determine: 1) whether projects consider themselves to be replications of the JDRP projects, 2) the number of children being served, and 3) the amount and sources of support.

Fourteen sites were visited: 6 continuation sites; 6 replication sites and 2 replications of JDRP approved projects.

CHAPTER THREE: HCEEP ANALYSIS

A. Input Analysis

As the first step in determining the impact of the program, this impact study looked at the extent to which the program has met its mandate to develop projects to meet diverse needs and situations and distribute them geographically throughout the United States. For this part of the study, these actions taken by the program to meet its mandate, or "input" factors, were considered:

- Types of agencies funded;
- Geographical distribution of agencies funded (states and territories);
- Service areas funded (urban, rural);
- Types of handicapping conditions funded;
- Types of treatment modalities funded;
- Number of children served;
- Ages of children served; and,
- Amount of funds allocated.

The data sources were the surveys, administrative records and information obtained through phone calls to clarify the respondents' questions.

HCEEP Demonstration Project Sponsoring Agencies

Any public or private nonprofit agency or organization is an eligible applicant and it was anticipated that a wide range of types of agencies would be funded to carry out activities under this program. Survey results showed the following distribution:

Table 1

Type of Agency Sponsors for HCEEP
Demonstration Projects for the Period 1965-1980

<u>Type of Agency Sponsor</u>	<u>Number of HCEEP Demon. Projects</u>	<u>Percent</u>
Private, Nonprofit Organizations	88	31.0
Local Education Agencies (LEAs)	87	31.0
Institutions of Higher Education (Non-Medical)	66	24.0
Public Agencies	27	10.0
Hospitals	11	4.0
TOTAL:	280	100.0

As shown in Table 1, the 280 HCEEP demonstration projects have been sponsored by a variety of public and private nonprofit agencies.

Private agencies and public schools (LEAs) are the largest categories of sponsors. The next category is colleges and universities and the smallest category is hospitals. Included among the 280 agencies are day care and Head

Start programs, a parent cooperative nursery school, and several Indian tribes.

Geographic Distribution of HCEEP Demonstration Projects

This study next looked at the extent to which the HCEEP encouraged diversity among programs so that models would be developed that are applicable to as many geographical locations as possible, and distributed projects throughout the nation.

Table 2A (following page) shows the geographic distribution of the HCEEP demonstration projects. This table shows the states in which demonstration projects operated for the period 1969-1980. (It is important to note that projects are funded for a three-year period. Consequently, continuation of a project for the three-year period overlaps the year cells within each state). The row total (69/80) indicates the number of demonstration projects which operated within a given state for the period 1969-1980. The column total indicates the number of demonstration projects which operated within a given year. This table indicates that there were a total of 962 demonstration project years for the period 1969-1980.

The most significant fact about the geographic distribution of the HCEEP demonstration projects by state and year, for the period 1969-1980, is that projects have operated in every state, as well as the Trust Territories and Puerto Rico. Also, as of 1981, American Samoa and the Virgin Islands are operating demonstration projects. Thus, the programs are nationally distributed as mandated by law.

Table 2A goes here.

Table 2A
Geographic Distribution of HCEEP Demonstration Projects
(1969-1980)

	69/70	70/71	71/72	72/73	73/74	74/75	75/76	76/77	77/78	78/79	79/80	69/80
Alabama	1	2	3	2	1	1	1	1	1	1	1	15
Alaska	1	1	1	0	0	0	0	0	1	1	1	6
Arizona	0	1	1	1	1	1	1	3	4	5	3	21
Arkansas	1	1	1	0	0	0	1	4	4	3	0	15
California	1	1	6	5	6	7	8	7	7	10	11	69
Colorado	0	0	1	2	4	6	5	3	1	3	5	30
Connecticut	0	0	1	1	1	0	0	0	1	1	0	5
Delaware	0	0	0	0	0	0	0	1	2	4	6	30
Dist. of Col.	1	1	3	2	4	3	3	1	1	1	2	11
Florida	2	2	2	0	0	0	0	1	1	1	2	11
Georgia	0	1	1	3	3	6	4	4	4	4	4	34
Hawaii	0	0	0	1	1	2	1	1	0	0	0	6
Idaho	0	0	1	1	2	2	2	1	0	1	1	11
Illinois	0	1	2	3	4	6	7	5	3	3	4	38
Indiana	0	0	1	1	1	1	2	2	1	0	0	9
Iowa	0	0	0	3	3	4	1	2	1	1	0	15
Kansas	0	0	1	1	1	0	0	0	1	2	1	8
Kentucky	0	0	1	1	1	1	1	2	3	4	4	18
Louisiana	1	1	1	0	0	1	1	2	3	4	0	12
Maine	0	0	0	1	2	2	2	2	2	1	0	12
Maryland	0	1	1	1	0	2	2	3	4	4	2	22
Massachusetts	1	2	3	3	2	3	7	7	6	2	3	39
Michigan	1	1	1	1	4	6	5	3	2	3	3	30
Minnesota	1	1	1	0	0	1	1	1	1	1	1	9
Mississippi	0	1	2	2	1	1	1	2	2	3	3	17
Missouri	0	1	1	2	2	2	2	0	1	3	3	17
Montana	0	0	0	1	1	1	0	0	1	1	1	6
Nebraska	1	1	1	0	1	1	1	0	1	1	1	9
Nevada	0	0	1	1	1	0	0	1	1	1	0	7
New Hampshire	0	0	0	1	1	1	1	2	2	1	0	9
New Jersey	1	1	1	1	1	1	0	0	1	2	3	12
New Mexico	0	0	1	2	3	2	1	1	2	3	2	17
New York	2	5	6	5	4	5	5	3	5	8	5	59
North Carolina	1	1	1	1	1	3	2	3	3	3	2	21
North Dakota	0	0	0	1	2	2	1	0	1	1	1	9
Ohio	0	1	1	1	1	3	3	3	3	5	6	29
Oklahoma	0	0	0	1	1	1	0	0	0	0	1	4
Oregon	0	1	3	3	3	1	1	2	3	3	2	22
Pennsylvania	0	1	3	3	3	1	1	6	7	5	5	38
Puerto Rico	1	0	2	2	3	2	5	1	1	0	0	4
Rhode Island	0	0	0	0	0	1	1	1	0	0	0	3
South Carolina	1	1	1	1	3	2	2	0	1	2	2	14
South Dakota	0	0	1	1	1	1	0	0	0	0	0	3
Tennessee	0	0	0	1	1	1	0	0	0	0	0	3
Texas	1	3	3	4	4	8	8	8	7	7	7	60
Trust Terr.	1	3	3	4	4	8	8	8	7	7	7	60
Utah	0	0	0	0	1	1	1	0	0	0	0	3
Vermont	0	0	0	1	1	2	2	2	1	1	0	10
Virginia	0	1	1	1	3	3	4	4	4	6	3	32
Washington	1	1	1	1	2	2	2	1	2	2	2	18
West Virginia	0	0	1	1	1	0	0	1	1	1	0	6
Wisconsin	1	2	2	1	0	0	0	1	1	1	0	8
Wyoming	0	1	1	1	0	0	0	1	1	1	0	6
TOTAL	23	42	68	73	83	103	102	105	113	124	126	962

Table 2B (pages 21-22) shows the three-year demonstration projects completed by 1980. (It is important to note that the years have been collapsed to represent the three-year funding cycles. Consequently, any cell entry by state represents the number of completed demonstration projects). The row total (69/80) indicates the number of demonstration projects completed within a given state for the period 1969-1980. The column total indicates the number of completed demonstration projects for a given funding period.

Table 2C provides a summary of Table 2B, the three-year demonstration projects completed between 1969 and 1980. This table is presented below.

Table 2C

Three Year Demonstration Projects
Completed Between 1969 and 1980

1969 - 1972	22
1970 - 1973	20
1971 - 1974	25
1972 - 1975	27
1973 - 1976	31
1974 - 1977	43
1975 - 1978	25
1976 - 1979	34
1977 - 1980	53
<hr/>	
TOTAL:	280

Table 28

Three Year Demonstration Projects Completed by 1980

	69/72	70/73	71/74	72/75	73/76	74/77	75/78	76/79	77/80	69/80
Alabama	1	1	1			1			1	5
Alaska	1								1	2
Arizona		1			1			3	1	6
Arkansas	1						1	3		5
California	1		5		1	6	1		5	19
Colorado			1	1	2	3			1	8
Connecticut			1						1	2
Delaware								1		1
Dist. of Col.	1		1	1	2				2	7
Florida	2							1		3
Georgia		1		2	1	3		1	3	11
Hawaii				1		1				2
Idaho			1		1	1				3
Illinois		1	1	1	2	3	2		1	11
Indiana			1			1	1			3
Iowa				3		1		1		5
Kansas			1					1		2
Kentucky			1						3	4
Louisiana	1					1		1	2	5
Maine				1	1		1	1		4
Maryland		1				2		2	1	6
Massachusetts	1	1	1	1		2	3	2	1	12
Michigan	1			1	3	2		1	1	9
Minnesota	1					1			1	3
Mississippi		1	1			1		1	1	5
Missouri		1			2				1	4
Montana				1					1	2
Nebraska	1				1				1	3
Nevada			1					1		2
New Hampshire				1			1	1		3
New Jersey	1			1					1	3
New Mexico			1	1	1			1	1	5
New York	2	3	1	1	2	2	1		4	16
North Carolina	1			1		1	1	1	1	6
North Dakota				1	1				1	3
Ohio		1			1	2		1	4	9

	69/72	70/73	71/74	72/75	73/76	74/77	75/78	76/79	77/80	69/80
Oklahoma				1						1
Oregon		1	2		1			2	1	7
Pennsylvania			2		1	1	3	2	2	11
Puerto Rico						1				1
Rhode Island	1							1	1	3
South Carolina			1		2				1	4
South Dakota				1						1
Tennessee	1	2				2	1			6
Texas	1	2		2	2	4	2	2	3	18
Trust Terr.					1					1
Utah				1		1	1			3
Vermont	1						1			2
Virginia		1		2	1		3	1	2	10
Washington	1			1	1		1		1	5
West Virginia			1					1	1	3
Wisconsin	1	1					1			3
Wyoming		1						1		2
Total	22	20	25	27	31	43	25	34	53	280

Between 1969, the first demonstration funding year, and 1980 (the cutoff year specified by the work scope for this study) there have been a total of 280 completed demonstration projects.

Urban/Rural Distribution

This study next looked at the distribution of HCEEP projects in urban, rural or both urban and rural areas for the period under consideration. According to the Census Bureau, 73.5% of the U.S. population resided in urban areas in 1970, the latest date this information is available, and 26.5% resided in rural areas.

Table 3

Distribution of HCEEP Demonstration Projects
Urban/Rural Areas For The Period 1969-1980

<u>Three Year Demo. Period</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban and Rural</u>	<u>Total</u>
1969 - 1972	12	4	6	22
1970 - 1973	5	8	7	20
1971 - 1974	12	4	9	25
1972 - 1975	8	8	10	27
1973 - 1976	11	10	10	31
1974 - 1977	21	9	13	43
1975 - 1978	10	4	11	25
1976 - 1979	11	10	14	34
1977 - 1980	16	14	28	53
	<hr/>	<hr/>	<hr/>	<hr/>
TOTAL:	106	72	102	280
PERCENT:	38.0	26.0	36.0	100.0

As shown in Table 3, the highest number of the 280 HCEEP demonstration projects stated they provide services to urban areas. An almost equal number of projects stated they provide services to both urban and rural areas. Fewer projects provide services to rural areas only, but the percentage is in proportion to the distribution of the population. Thus, the needs of rural areas are being addressed as mandated by the law.

HCEEP Demonstration Project Service Delivery Settings

Another environmental factor is the service delivery setting. The environments in which services are delivered also vary. Typically, service delivery settings are home-based, center-based, both home and center-based or some other delivery mode (e.g., hospital, clinic).

Table 4 presents the primary service delivery settings of HCEEP demonstration projects for the period 1969-1980. This table is shown below.

Table 4

Service Delivery Settings of HCEEP
Demonstration Projects for the Period 1969-1980

<u>Three Year Demo. Period</u>	<u>Home-Based</u>	<u>Center-Based</u>	<u>Home & Center-Based</u>
1969 - 1972	1	12	9
1970 - 1973	1	10	9
1971 - 1974	1	13	11
1972 - 1975	1	9	17
1973 - 1976	2	12	17
1974 - 1977	1	20	22
1975 - 1978	1	10	14
1976 - 1979	4	16	15
1977 - 1980	4	18	30
	<hr/>	<hr/>	<hr/>
TOTAL:	16	120	144
PERCENT:	5.0	43.0	52.0

As shown in Table 4, the majority of the 280 HCEEP demonstration projects deliver services in a home and center-based setting. This enables projects to provide alternative arrangements to meet individual needs of children and families. The next category is the center-based service delivery setting. Few projects provide services in a home-based setting only. Thus,

services are provided in a variety of environments as mandated by the law. The study next examined the range of the handicapping conditions being addressed by the projects.

Handicapping Conditions of Children Served by HCEEP Demonstration Projects

The projects serve a full range of handicapped children. Sample information from the 1979-80 project year was gathered from progress reports submitted to the program office and from a survey by the Technical Assistance providers, TADS and WESTAR. Table 5 (below) provides a breakout of the children served in demonstration projects that year by handicapping condition and age.

Table 5

**Handicapping Conditions and Ages of Children Served by Demonstration Projects
1979-1980**

Type of Handicap	Number of Handicapped Served by Age						Total	%
	0-2	3-5	6-9	10-12	13-18			
Trainable mentally retarded	197	171	27	...	...		395	11
Educable mentally retarded	177	211	44	1	...		433	12
Specific learning disabilities	45	194	92	5	...		336	9
Deaf-blind	11	10	...	...	...		21	1
Deaf or hard of hearing	76	59	21	4	...		160	4
Visually handicapped	46	39	7	...	...		92	3
Seriously emotionally disturbed	43	206	28	...	...		277	8
Speech impaired	98	528	37	...	...		663	18
Other health impaired	314	111	13	...	...		438	12
Orthopedically impaired	255	179	49	7	2		492	13
At risk ^a	218	7	...	...	...		225	6
Noncategorical ^a	28	80	...	...	...		108	3
Total	1,508	1,795	318	17	2		3,640	100
Multihandicapped^b	431	389	71	8	2		901	25

Note. n=127

^a These categories are not included on the standard form used by projects for reporting to BEH. Categories and numbers of children are included here in order to accurately reflect responses to the TADS/WESTAR survey.

^b Multihandicapped children have also been counted in the totals by being listed under their primary handicapping conditions.

^c Handicapped Children's Early Education Program: 1979-80 Overview and Directory, produced by the Technical Assistance Development System (TADS) and the Western States Technical Assistance Resource (WESTAR) for the Bureau of Education for the Handicapped under contract number 300-77-0507 and 300-77-0508, Marcia J. May and Ruth Meyer, editors, March 1980, page 6.

Types of Treatment Modalities Used by the HCEEP Demonstration Projects

A variety of treatment approaches are used by the 280 HCEEP demonstration projects. The 280 HCEEP demonstration projects typically focused their intervention strategies in the:

- Language-Communication;
- Social-Emotional;
- Cognitive-Academic; and,
- Motor areas.

It is noted that while these areas are listed as primary, they are not discrete in that projects typically focus on all developmental areas.

With regard to the philosophical base of the curricula, the primary philosophical approaches used by the 280 HCEEP demonstration projects span a continuum from child-directed to teacher-directed learning. The instructional approaches within this continuum include:

- Experiential or Traditional;
- Montessori;
- Piagetian;
- Diagnostic - Prescriptive; and,
- Behavioral.

The descriptions of the JDRP approved projects beginning on page 109 provide a sample of the diversity of approaches.

Children served by the HCEEP Demonstration Projects

It is important to note that the number of children served in demonstration projects is not expected to be large, since direct service is not the focus of such a program. Effort and resources are directed to the development and demonstration of a model with potential to be used by many, rather than to providing immediate services to large numbers of children. The number is significant, however, as a base for comparison with the number of children served through continuation of projects and through replications.

The number of children served by the 280 HCEEP demonstration projects is presented in Table 6. This table shows the number of children served for the period 1969-1980.

Table 6

Children by HCEEP Demonstration
Projects for the Period 1969-1980

<u>Demonstration Years</u>	<u>Number of Children Served</u>
1969-70	359
1970-71	880
1971-72	1630
1972-73	1728
1973-74	1989
1974-75	2347
1975-76	2478
1976-77	2575
1977-78	3390
1978-79	2282*
1979-80	1728**
	<u>21,386</u>

* Second and Third year only

** Third year only

As shown in Table 6, there was an increase in the number of children served each year with the exception of the last two years. The reductions in 1978-79 and 1979-80 reflect the effect of including only projects which had

completed the three-year demonstration period within the time period of this study. If the full number of demonstration projects funded during 1978-80 had been included, a steady increase in the number of children served would have been shown.

Ages of Children Served by The HCEEP Demonstration Projects

The age ranges of the children served by the 280 HCEEP demonstration projects for the period 1969-1980 are presented in Table 7. This table is shown below.

Table 7

Age Range of Children Served by HCEEP Demonstration
Projects For The Period 1969-1980

<u>Age Ranges</u>	<u>Number of Demonstration Projects</u>	<u>Percent</u>
0-3	52	19.0
0-5	58	21.0
0-8	54	19.0
3-8	116	41.0
	<hr/>	<hr/>
TOTAL:	280	100.0

As shown in Table 7, 41% of the projects served children in the 3-8 age range. About 40% of the projects serve the 0-5 or 0-8 age range, while 19%

served children from birth to age 3. The majority (164) of the 280 demonstration projects provided services to some children beginning at birth.

A goal of the program is to develop models for the most underserved group, the birth to three children. Nearly 60% of the projects serve at least some children beginning at birth, and the proportion has increased steadily over the period being studied. Several models have been funded to operate in neonatal intensive care units. Others serving children with easily identified handicapping conditions, such as Down's Syndrome, begin services as soon as the parents are ready to participate.

Amount of Funds Allocated to the HCEEP Demonstration Projects

Another measure of distribution is the amount of money allocated to the 280 HCEEP demonstration projects for the three-year funding period. A break-out of demonstration funding is presented in Table 8 (on the following page). This table presents the amount of funding allocated to each State per year.

Many factors influence the distribution of projects in a competitive grant program, including the number and quality of applications and the array of proposed approaches. However, the distribution shows that the states with

the largest populations have, in general, received the most funds.

Table 8
Demonstration Funds 1969-1980
(By Thousands)

	69/70	70/71	71/72	72/73	73/74	74/75	75/76	76/77	77/78	78/79	79/80	69/80
Alabama	35	115	306	228	103	89	119	119	115	129	126	1454
Alaska	29	95	111	0	0	0	0	0	78	104	119	536
Arizona	0	27	114	141	40	70	149	229	361	393	244	1768
Arkansas	28	110	134	0	0	0	131	352	415	240	0	1410
California	26	100	450	499	559	456	810	814	529	957	1144	6344
Colorado	0	0	71	188	348	453	397	305	73	237	438	2510
Connecticut	0	0	52	110	110	0	0	0	67	224	400	963
Delaware	0	0	0	0	0	0	0	66	113	120	0	299
Dist. of Col.	30	100	209	170	320	261	224	90	142	345	618	509
Florida	60	210	214	0	0	0	0	66	100	101	141	892
Georgia	0	68	128	195	208	472	410	392	312	436	438	3059
Hawaii	0	0	0	60	90	176	120	120	0	0	0	566
Idaho	0	0	50	100	160	143	173	100	0	65	102	893
Illinois	0	97	184	288	280	444	663	569	337	238	410	3510
Indiana	0	0	50	110	110	96	263	307	120	79	110	1245
Iowa	0	0	0	165	350	429	116	179	110	120	0	1469
Kansas	0	0	50	58	58	0	0	62	110	194	99	631
Kentucky	0	0	47	110	110	0	0	0	172	363	473	1275
Louisiana	28	100	100	0	0	70	68	131	247	396	351	1491
Maine	0	0	0	60	188	210	141	171	212	110	0	1092
Maryland	0	40	115	125	0	118	174	392	372	415	226	1977
Massachusetts	120	133	265	254	275	282	375	659	692	409	171	3635
Michigan	100	100	100	60	260	488	445	287	179	279	273	2571
Minnesota	27	97	99	0	0	40	90	90	86	110	119	758
Mississippi	0	22	151	230	110	40	50	164	131	268	196	1362
Missouri	0	35	120	185	50	82	82	0	67	242	343	1206
Montana	0	0	0	60	60	111	0	0	73	102	120	526
Nebraska	28	115	142	0	40	83	83	0	69	95	100	753
Nevada	0	0	49	100	100	0	0	59	100	100	64	572
New Hampshire	0	0	0	60	121	121	65	186	186	136	0	875
New Jersey	30	100	111	60	100	100	0	0	84	190	295	1070
New Mexico	0	0	56	167	186	126	70	66	155	240	202	1268
New York	126	406	781	536	383	529	432	330	399	705	1128	5755
North Carolina	29	115	120	60	110	234	153	256	286	272	200	1835
North Dakota	0	0	0	50	140	196	96	70	101	120	0	773
Ohio	0	25	100	125	60	206	293	325	399	536	598	2667
Oklahoma	0	0	0	60	100	110	0	0	0	70	0	340
Oregon	0	24	177	275	265	100	100	119	276	315	197	1848
Pennsylvania	29	0	155	220	320	149	352	509	669	519	462	3384
Puerto Rico	0	0	0	0	0	60	129	130	0	0	70	389
Rhode Island	25	116	116	0	0	0	0	52	170	283	223	985
South Carolina	0	0	53	99	219	166	166	0	70	160	218	1151
South Dakota	0	0	0	60	100	109	0	0	0	0	0	269
Tennessee	35	157	270	197	0	122	253	358	120	155	288	1955
Texas	28	150	324	361	336	608	708	844	632	651	673	5315
Trust Terr.	0	0	0	0	60	83	83	0	0	0	0	226
Utah	0	0	0	60	113	177	180	230	120	0	79	859
Vermont	30	88	115	0	0	0	60	90	100	0	80	563
Virginia	0	25	118	196	203	295	266	399	604	393	283	2782
Washington	30	113	117	50	160	183	143	150	208	158	303	1615
West Virginia	0	0	53	90	90	0	0	66	179	94	105	877
Wisconsin	25	160	180	130	0	0	86	110	135	0	0	826
Wyoming	0	20	96	96	0	0	0	66	110	117	0	805
TOTAL	898	3063	6253	6448	6995	8257	8718	10,079	10,385	11,985	12,229	85,370

The average amount of demonstration funding for the period 1969-1980 is reported in Table 9. This table is shown below.

Table 9
Average Demonstration Project Funding
1969-1980

<u>Years</u>	<u>Funding (by thousands)</u>
1969-70	\$39.0
1970-71	72.0
1971-72	92.0
1972-73	88.3
1973-74	84.3
1974-75	80.2
1975-76	85.5
1976-77	96.0
1977-78	91.9
1978-79	96.7
1979-80	97.1
1969-1980	88.7
Average demonstration funding for 1969-1980	88.7

As shown in Table 9, the average amount of demonstration funds allocated for the period 1969-1980 is \$89,000. The average amount of yearly funding ranged from \$39,000 (lowest amount) to \$97,100 (highest amount).

The first year's level was the lowest, as the majority of the initial grants were for planning activities. The variation in the average funding amount is caused in part by the varying numbers of first, second and third year projects funded during a given year. First year projects require less funding as a rule to develop and pilot their model. Second year projects add demonstration costs, and third year projects typically increase dissemination activities. The size of the appropriation for the program in a given year influences the percentage of first year to second and third year projects, and hence the average project funding level.

B. Output Analysis

The second major step in determining the impact of the program involved an examination of the events which occurred as a result of the operating demonstration models. For this part of the study, the following "output" factors were considered:

- ° Follow up;
- ° Continuation;
- ° Direct Outreach;
- ° Replication; and,
- ° Other.

Follow-Up Output

The subsequent placement of children leaving HCEEP demonstration projects is an important output variable in analyzing the impact of the program. The 200 completed impact survey instruments give an overview of the types of placements and settings of children who left HCEEP demonstration projects. The types of placements and settings are presented in Table 10, below.

Table 10

Placements and Settings of Children Who
Left HCEEP Demonstration Projects

Integrated Placements - 54.5%

Full-time 81.7

Part-time 18.3

Types of Settings:

Nursery Schools - 7.4

Day Care Programs - 6.6

Head Start - 14.7

Pre-Kindergarten - 12.2

Kindergarten - 21.7

Primary Grades - 37.4

Special Education Placements - 45.5%

Full-time 79.3

Part-time 20.7

Types of Settings:

Pre-Kindergarten - 28.1

Kindergarten - 30.1

Primary Grades - 41.8

This table shows that more than half of the graduates were in less expensive integrated (regular) placements. Almost 80 percent of those children were in integrated placements on a full-time basis.

Another source of information about children who left HCEEP demonstration programs is the Follow-Up Survey. The HCEEP Follow-Up Survey was completed by 114 agencies which received students from projects supported by the HCEEP. Tables 11 & 12, present a profile of the progress of children leaving HCEEP demonstration projects at placement agencies. Table 11 is a rating of children's progress in relation to their peers.

Table 11

Teacher Rating of Children's Progress
In Relation to Their Peers

<u>Progress in Relation to Peers</u>	<u>Total Responses</u>	<u>Percent</u>
Top third of class	23	20.0
Middle third of class	54	47.0
Bottom third of class	37	33.0
	<hr/>	<hr/>
TOTAL:	114	100.0

As shown in Table 11, 20 percent of the children in placement agencies were performing in the top third of their regular or special class. Also, 47 percent were performing in the middle third of their class, while 33 percent performed in the bottom third of the class. This table shows that 67 percent of the children who leave HCEEP demonstration projects perform in the average and above average range in relation to their peers.

Table 12 is a rating of child progress in relation to the expectation of the placement agency. This table is shown below.

Table 12

Rating of Child Progress in Relation
To Expectation of Placement Agency

<u>Progress in Relation to Expectation</u>	<u>Total Responses</u>	<u>Percent</u>
Better than expected	51	45.0
About as expected	59	52.0
Poorer than expected	3	3.0
	<hr/>	<hr/>
	TOTAL: 113*	100.0

* One respondent did not answer.

As shown in Table 12, 45 percent of the children performed better than expected, while 52 percent performed as expected. The remaining 3 percent performed more poorly than expectation. This table suggests that 97 percent of the handicapped children who leave HCEEP demonstration projects perform within the expected and better than expected range.

Continuation Output

The HCEEP demonstration projects are funded for a three-year period.

Each project is expected to obtain funds from other sources at the end of the three year Federally supported demonstration period to continue the direct services to children and their families. This study found that of the 280 HCEEP demonstration projects funded between 1969-1980, 80 percent or 224 projects are still being continued by state and local funds. This percentage of continuation of programs and resulting services to children and their families is unusually high.

Table 13 profiles the number of children served in demonstration and continuation programs for the period 1969-1980. It shows that both the number of children served in demonstration and in continuation projects have shown a consistent increase. It is noted that the number of children reported in demonstration projects for 1978-79 and 1979-80 does not reflect the full three year period. These years are expected to reflect the overall pattern of increase in number of children served rather than a decline. Also, the number of children served in continuation projects at no cost to the HCEEP has progressively surpassed the number served directly in demonstration projects. A number of the continuation projects have increased the number of children they serve over time which appears to show long-range commitment to maintaining the services.

y
Table 13
Children Served in Demonstration and Continuation Projects
(1969-1980)

<u>HCEEP Demonstration Projects</u>		<u>Continuation Projects</u>
1969-70	359	-
1970-71	880	-
1971-72	1630	-
1972-73	1728	718
1973-74	1989	1371
1974-75	2347	2187
1975-76	2478	3068
1976-77	2575	4080
1977-78	3390	5484
1978-79	2282*	6300
1979-80	1728**	7409
	<hr/> 21,386	<hr/> 30,617

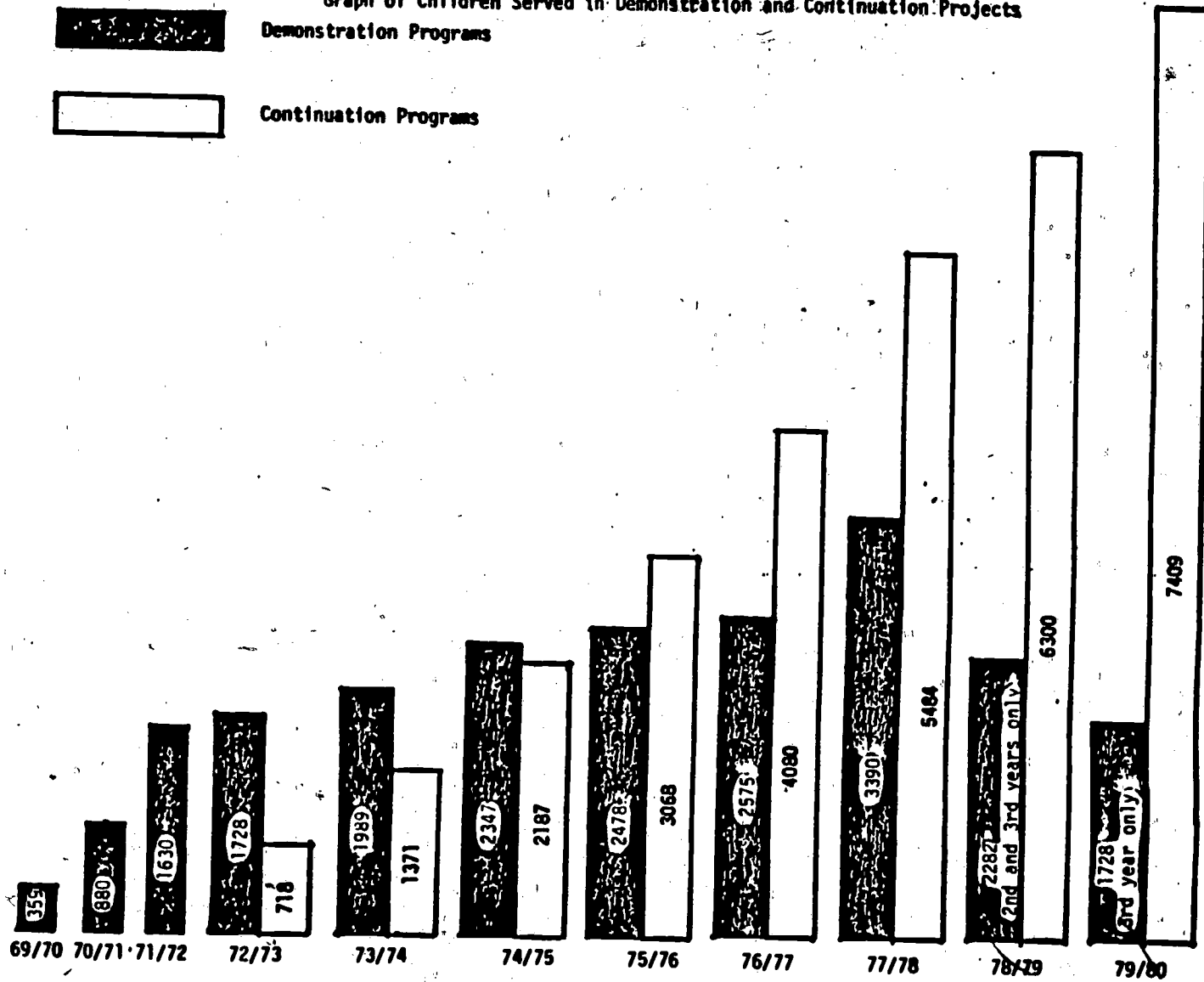
* Second and Third year only

** Third year only

Figure 2 portrays a graph of children served in demonstration and continuation projects.

Figure 2
Graph of Children Served in Demonstration and Continuation Projects
Demonstration Programs

Continuation Programs



Direct Outreach Output

The outreach component was developed to enable successful demonstration projects to respond to requests from other agencies for help in initiating or improving services for young children with handicaps. A requirement of outreach is obtaining funding, usually from state or local sources, to continue the services to children which were developed during the demonstration phase. Many of the 280 demonstration projects have been able to meet this criterion and the other criteria for outreach, discussed earlier in this report.

Table 14 shows the states in which HCEEP outreach projects were located for the period 1972-1980. The initial outreach grants were awarded three years after the demonstration program began in 1969. It is noted that there is overlap within the year cells due to continuous funding of some outreach projects. The outreach projects compete each year and may have been funded one year, or up to a total of 8 years.

The most significant fact about the geographic distribution of the HCEEP outreach projects by state and year, for the period 1972-1980, is that outreach projects have operated in almost every state, as well as the Trust Territories.

Table 14
Geographic Distribution of HCEEP Outreach Projects
(1969-1980)

	69/70	70/71	71/72	72/73	73/74	74/75	75/76	76/77	77/78	78/79	79/80	TOTAL
Alabama	0	0	0	0	0	2	1	1	1	1	1	7
Alaska	0	0	0	1	1	1	1	1	1	0	0	6
Arizona	0	0	0	0	1	1	1	1	0	0	1	5
Arkansas	0	0	0	1	1	1	0	0	0	0	0	3
California	0	0	0	1	1	5	5	6	6	4	3	31
Colorado	0	0	0	0	0	0	1	2	4	2	2	11
Connecticut	0	0	0	0	0	1	1	1	0	0	0	3
Delaware	0	0	0	0	0	0	0	0	0	0	0	0
District of Col.	0	0	0	1	1	1	1	2	1	1	0	8
Florida	0	0	0	2	2	2	1	1	1	0	0	9
Georgia	0	0	0	0	1	1	2	3	2	1	1	11
Hawaii	0	0	0	0	0	0	1	1	1	1	0	4
Idaho	0	0	0	0	0	0	1	2	3	1	0	7
Illinois	0	0	0	0	1	2	3	4	4	6	5	25
Indiana	0	0	0	0	0	1	1	1	1	2	2	8
Iowa	0	0	0	0	0	0	2	2	2	0	0	6
Kansas	0	0	0	0	0	1	1	1	0	0	0	3
Kentucky	0	0	0	0	0	1	1	1	1	0	0	4
Louisiana	0	0	0	1	0	0	0	0	1	1	1	4
Maine	0	0	0	0	0	0	1	2	2	2	1	8
Maryland	0	0	0	0	1	1	1	1	1	1	1	7
Massachusetts	0	0	0	0	1	2	1	1	0	3	4	12
Michigan	0	0	0	1	1	1	1	4	5	5	2	20
Minnesota	0	0	0	1	1	1	1	0	1	1	1	7
Mississippi	0	0	0	0	1	2	2	1	2	1	2	11
Missouri	0	0	0	0	0	0	0	2	2	2	1	7
Montana	0	0	0	0	0	0	0	0	0	0	0	0
Nebraska	0	0	0	1	1	1	1	1	0	0	0	5
Nevada	0	0	0	0	0	0	0	0	0	0	0	0
New Hampshire	0	0	0	0	0	0	0	0	0	0	0	0
New Jersey	0	0	0	1	1	1	1	0	0	0	0	4
New Mexico	0	0	0	0	0	1	1	1	1	0	0	4
New York	0	0	0	2	4	5	5	2	1	1	0	20
North Carolina	0	0	0	1	1	1	2	1	2	2	2	12
North Dakota	0	0	0	0	0	0	0	1	1	1	0	3
Ohio	0	0	0	0	1	1	1	0	1	1	1	6
Oklahoma	0	0	0	0	0	0	1	1	1	0	0	3
Oregon	0	0	0	0	0	0	0	1	1	1	3	6
Pennsylvania	0	0	0	0	0	2	2	3	2	3	2	14
Puerto Rico	0	0	0	0	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	1	0	0	0	0	0	0	1	2
South Carolina	0	0	0	0	0	1	1	2	2	2	0	8
South Dakota	0	0	0	0	0	0	1	1	1	0	0	3
Tennessee	0	0	0	0	2	2	2	1	2	3	3	15
Texas	0	0	0	1	2	2	3	4	5	4	2	23
Trust Terr.	0	0	0	0	0	0	0	1	0	0	0	1
Utah	0	0	0	0	0	0	1	1	2	2	2	8
Vermont	0	0	0	1	1	1	0	0	0	0	0	3
Virginia	0	0	0	0	1	1	2	3	3	3	3	16
Washington	0	0	0	1	1	1	1	1	1	1	1	8
West Virginia	0	0	0	0	0	1	1	1	1	1	1	6
Wisconsin	0	0	0	1	2	2	2	2	2	2	2	15
Wyoming	0	0	0	0	1	1	1	0	0	0	1	4
TOTAL	0	0	0	19	32	51	60	69	71	62	52	416

Table 15

Three-Year Demonstration Projects Completing the Third Year
and Receiving Outreach Grants
(1969-1980)

<u>Year Completed</u>	<u>No. of Demonstrations</u>	<u>No. Receiving Outreach Grants</u>	<u>Percent</u>
1972	22	19	86.4
1973	20	17	85.0
1974	25	20	80.0
1975	27	19	70.4
1976	31	25	80.6
1977	43	20	46.5
1978	25	12	48.0
1979	34	8	23.5
<hr/>			
TOTAL:	227	140	61.7
<hr/>			
1969 - 1976	125	100	80.0
1974 - 1979	102	40	39.2

As shown in Table 15, between 1969 and 1979, 140 of the 227 completed demonstration projects received outreach grants, which represents approximately 62%. The longitudinal trend is to funding a smaller percentage of the projects which have completed the third year of demonstration to carry outreach activities.

The amount of money allocated to the 140 outreach projects was individually calculated. The outreach funding is presented in Table 16. This table presents the amount of funding allocated to each state per year.

The average amount of outreach funding for the period 1972-1980 is reported in Table 17.

Table 16
Outreach Funding 1969-1980
(By Thousands)

	69/70	70/71	71/72	72/73	73/74	74/75	75/76	76/77	77/78	78/79	79/80	TOTAL
Alabama	0	0	0	0	0	147	77	77	98	103	107	609
Alaska	0	0	0	60	60	60	60	60	60	0	0	360
Arizona	0	0	0	0	60	60	60	70	0	0	100	350
Arkansas	0	0	0	31	60	86	0	0	0	0	0	197
California	0	0	0	68	55	364	364	476	493	349	272	2433
Colorado	0	0	0	0	0	0	75	138	273	120	160	766
Connecticut	0	0	0	0	0	90	63	70	0	0	0	223
Delaware	0	0	0	0	0	0	0	0	0	0	0	0
District of Col.	0	0	0	45	50	106	90	213	89	89	0	682
Florida	0	0	0	67	90	122	38	54	54	0	0	425
Georgia	0	0	0	0	105	130	210	330	305	128	110	1318
Hawaii	0	0	0	0	0	0	62	77	80	79	0	298
Idaho	0	0	0	0	0	0	95	160	229	69	0	553
Illinois	0	0	0	0	100	190	245	424	427	531	438	2355
Indiana	0	0	0	0	0	95	90	85	163	230	233	896
Iowa	0	0	0	0	0	0	120	145	140	0	0	405
Kansas	0	0	0	0	0	68	50	60	0	0	0	178
Kentucky	0	0	0	0	0	100	81	80	80	0	0	341
Louisiana	0	0	0	55	0	0	0	0	68	66	68	257
Maine	0	0	0	0	0	0	68	139	150	149	80	586
Maryland	0	0	0	0	78	59	59	59	80	84	80	499
Massachusetts	0	0	0	0	90	164	90	90	0	270	444	1148
Michigan	0	0	0	60	80	93	98	271	372	386	179	1539
Minnesota	0	0	0	50	100	136	149	0	74	80	82	671
Mississippi	0	0	0	0	90	187	153	80	170	87	144	911
Missouri	0	0	0	0	0	0	0	120	120	187	42	469
Montana	0	0	0	0	0	0	0	0	0	0	0	0
Nebraska	0	0	0	45	50	55	85	80	0	0	0	315
Nevada	0	0	0	0	0	0	0	0	0	0	0	0
New Hampshire	0	0	0	0	0	0	0	0	0	0	0	0
New Jersey	0	0	0	50	40	30	15	0	0	0	0	135
New Mexico	0	0	0	0	0	71	95	85	84	0	0	335
New York	0	0	0	105	622	843	528	163	75	80	0	2416
North Carolina	0	0	0	59	70	90	150	90	160	163	195	977
North Dakota	0	0	0	0	0	0	0	80	80	85	0	245
Ohio	0	0	0	0	90	90	90	0	85	81	81	517

Table 16
Outreach Funding 1969-1980

(By Thousands)

(Continued)

	69/70	70/71	71/72	72/73	73/74	74/75	75/76	76/77	77/78	78/79	79/80	TOTAL
Oklahoma	0	0	0	0	0	0	42	46	48	0	0	136
Oregon	0	0	0	0	0	0	0	100	100	124	242	566
Pennsylvania	0	0	0	0	0	180	156	233	168	248	195	1180
Puerto Rico	0	0	0	0	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	85	0	0	0	0	0	0	88	173
South Carolina	0	0	0	0	0	77	55	162	163	161	0	618
South Dakota	0	0	0	0	0	0	62	80	88	0	0	230
Tennessee	0	0	0	0	165	165	165	100	165	338	297	1395
Texas	0	0	0	29	133	133	210	290	356	358	167	1676
Trust Terr.	0	0	0	0	0	0	0	80	0	0	0	80
Utah	0	0	0	0	0	0	73	66	194	188	197	718
Vermont	0	0	0	0	40	60	85	0	0	0	0	185
Virginia	0	0	0	0	87	87	118	238	258	269	280	1337
Washington	0	0	0	60	60	60	60	60	60	92	103	562
West Virginia	0	0	0	0	0	95	88	85	80	84	71	503
Wisconsin	0	0	0	150	236	259	160	252	316	228	218	1819
Wyoming	0	0	0	0	65	66	64	0	0	0	112	307
TOTAL	0	0	0	1031	2676	4618	4698	5568	6005	5513	4785	34,894

8

Table 17

Average Outreach Funding For The
Period 1972-1980

<u>Years</u>	<u>Funding (by thousands)</u>
1972-73	54.3
1973-74	83.6
1974-75	90.5
1975-76	78.3
1976-77	80.7
1977-78	84.6
1978-79	88.9
1979-80	92.0
<hr/>	
1972-1980	83.9

As shown in Table 17, the average amount of outreach funds allocated for the period 1972-1980 is \$84,000. The average amount of yearly funding ranged from \$54,300 (lowest amount) to \$92,000 (highest amount). It is noteworthy that these average outreach funding ranges correspond to the first (lowest) and the last (highest) funding periods covered by this study.

Table 18 presents the total demonstration and outreach expenditure for the period 1969-1980. This table is shown on the following page.

Table 18

**Total Demonstration and Outreach Expenditure 1969-1980
(By Thousands)**

YEAR(S)	DEMO	%	OR	%	DEMO/OR	%
1969-70	898	100.0	-0-	0.0	898	100.0
1970-71	3063	100.0	-0-	0.0	3063	100.0
1971-72	6253	100.0	-0-	0.0	6253	100.0
1972-73	6448	86.2	1031	13.8	7479	100.0
1973-74	6995	72.3	2676	27.7	9671	100.0
1974-75	8257	64.1	4618	35.9	12,875	100.0
1975-76	8718	65.0	4698	35.0	13,416	100.0
1976-77	10,079	64.4	5568	35.6	15,647	100.0
1977-78	10,383	63.4	6005	36.6	16,390	100.0
1978-79	11,985	69.5	5513	31.5	17,498	100.0
1979-80	12,229	71.0	4785	28.1	17,014	100.0
1969-80	85,310	71.0	34,894	29.0	120,204	100.0

The average agency funding levels of both demonstration and outreach grants are presented in Table 19. This table is shown on the following page.

As shown in Table 19, the average agency funding levels in both demonstration and outreach appear fairly constant after the first few start-up years. This is deceptive, however, because the figures are not adjusted to reflect inflation. In real dollars, the funding has been declining steadily without significant adjustment to the declining value of the dollar. Fewer real dollars are granted every year.

Table 19
HCEEP Mean Agency Funding Levels
By Thousands

	<u>DEMONSTRATION</u>		<u>OUTREACH</u>	
	<u>Nominal Dollars</u>	<u>Real 69 Dollars</u>	<u>Nominal Dollars</u>	<u>Real 72 Dollars</u>
1969/70	39.0	39.0		
1970/71	72.9	68.8		
1971/72	92.0	83.3		
1972/73	86.3	77.4	54.3	54.3
1973/74	84.3	69.5	83.6	78.7
1974/75	80.2	59.6	90.5	76.8
1975/76	85.5	58.2	78.3	60.9
1976/77	96.0	61.8	80.7	59.3
1977/78	91.9	55.6	84.6	58.4
1978/79	96.7	54.3	88.9	57.0
1979/80	97.1	49.0	92.0	53.0

Replication Output

For the purpose of the HCEEP program, replication was defined as the use of the model developed during the demonstration period by another agency, at a minimum duplicating the services-to-children component and using the same curriculum with handicapped children. The replication services may be considered replications, even though they may have been adapted to meet local conditions, provided the approach and curriculum are based on the model developed by the demonstration project.

During the course of this study, 2,157 replications of demonstration models completed before or in the fiscal year 1979-80, have been identified. Of this number, 1,991 (92.3%) came from outreach programs; and 166 (7.7%) came from demonstration projects. The average number of handicapped children served by each program is 50. This means that approximately 107,850 handicapped children are known to be served by replications of HCEEP demonstration programs*.

While this is an impressive number, it understates the impact of the program. The greater number of programs were funded in the later part of the eleven years under examination; therefore, these programs have not had the time necessary to produce their maximum impact.

*Raw data from which findings were derived are on file in program office, Special Education Programs, U.S. Department of Education.

The Impact of HCEEP Demonstration/Outreach Funding as Seed Money

HCEEP Demonstration/Outreach funding uses a seed money approach and provides up-front funding. Measuring the effectiveness of up-front funding is open to a variety of approaches. One approach, and the one used in this study, is to measure the ability of up-front money to attract further funding from other sources. In the case at hand, it would be the capability of HCEEP funding to attract non-HCEEP funding. One of the values of this approach is that it not only measures the ability of seed funding to attract funding but is an implicit measure of the quality of the demonstration programs. Attracted funding represents a judgment by the non-HCEEP funding sources that there is a demonstration program that is worth further funding.

To accomplish this analysis, a six-step investment/yield model was designed (see Figure 1). This model is a series of six ratios. Each ratio determines the attracted funding by an x-to-y statement. The "x" usually indicates one dollar of HCEEP funding, and the "y" indicates the amount of attracted non-HCEEP funding. A 1:6.33 ratio, as an example, would indicate that each HCEEP funding dollar attracted \$6.33 of non-HCEEP funding.

Figure 1. Investment/Yield

Step	Investment/Yield Ratio	Cumulative Investment/Yield Ratio
1. Demonstration Funding (HCEEP funds)	0.71 : 0	0.71 : 0
2. Outreach Funding (HCEEP funds)	0.29 : 0	1 : 0
3. In-kind Contribution (non-HCEEP funds)	1 : 0.10	1 : 0.10
4. Demonstration Continuation (non-HCEEP Funds)	1 : 2.08	1 : 2.18
5. Outreach Continuation (non-HCEEP funds)	1 : 0.15	1 : 2.33
6. Replication (non-HCEEP funds)	1 : 16.04	1 : 18.37

Our first calculations determined the makeup of each HCEEP dollar that was invested in the eleven years between 1969 and 1980. Steps one and two of the model indicate that during this eleven-year period 71 percent of funding was for demonstrations, and 29 percent was for outreach. The HCEEP dollar in all the ratios is thus composed of 71 cents demonstration funding and 29 cents outreach funding.

The third step of the model deals with in-kind contributions. The federal requirement is 10 percent of the funding level. However, the in-kind contributions generally exceed this required minimum. But to keep this analysis as conservative as possible, we used the guideline minimum of 10

percent. The resultant ratio is 1:0.10; that is, for every HCEEP dollar, there is a dime of non-HCEEP programmatic funding (or the equivalent in in-kind contributions such as facilities).

The fourth step deals with the continuation of demonstration programs after they are no longer funded by HCEEP. With a continuation rate of 80 percent, the ratio is a considerable one--namely, 1:2.08. For every HCEEP demonstration/outreach dollar, \$2.08 is attracted to continue the demonstration programs.

The fifth step deals with the continuation of outreach activity. Outreach funds to assist other agencies are largely provided by HCEEP, and it was not originally anticipated that some sites which received assistance from outreach projects would in turn decide to continue supporting outreach activities after HCEEP funding for outreach ceased. However, a number of agencies have voluntarily taken this additional step. The funding attracted by outreach continuation results in a 1:0.15 ratio--for every HCEEP demonstration/outreach dollar, 15 cents of outreach continuation has been attracted.

The central thrust of the entire program is to develop demonstration programs, and, through outreach, to have these replicated on a local and state

level. There have been a large number of replications, and since none of the funding is from HCEEP, step six of the model determines the ratio to be 1:16.04. For each HCEEP demonstration/outreach dollar, \$16.04 has been attracted in the eleven years under study.

The HCEEP funding and non-HCEEP programmatic attracted funding represent dollars spent on programs to offer services to handicapped preschool children. To sum up these ratios:

In-kind contribution	1	:	0.10
Demonstration contribution	1	:	2.08
Outreach contribution	1	:	0.15
Replication	1	:	16.04
<hr/>			
Total	1	:	18.37

In direct programmatic funding, one HCEEP demonstration/funding dollar attracts \$18.37 in non-HCEEP programmatic funding.

While the attraction of non-HCEEP programmatic funding is impressive, it only gives a very limited view of the cost/benefit ratios accrued from HCEEP demonstration/outreach funding. From other studies,⁴ it has been documented that programs for handicapped preschool children also attract a great deal of

⁴ Battelle, progress reports and Summary Report - Lasting Effects After Preschool - A report by the central staff of the Consortium for Longitudinal Studies under the supervision of Irving Lazar and Richard Darlington; Final Report, HEW Grant 90C-1311 to the Education Commission of the States, U.S. Department of Health, Education, and Welfare; Office of Human Development Services Administration for Children, Youth and Families; DHEW Publication No. (OHS) 79-30179; Sept. 1979.

voluntarism, decrease the ensuing cost of education for the child, increase the lifetime earnings of the child, provide release time for the parent(s), and reduce the necessity for, and therefore, the cost of, institutionalization. While these benefits are harder to quantify than the exact equivalents of attracted programmatic funding, they are nonetheless, important financial (and human) outcomes that accrue directly to the demonstration programs and to their continuation and replication.

Certain conclusions appear in the handling of the enormous amount of data in so complex a program.

- ° HCEEP is an extraordinarily dynamic program which is both innovative and productive.
- ° The seed money concept has been so well integrated into the program that between 1969 and 1980 investment/yield is conservatively \$1.00 to \$18.37.
- ° The creativity and productivity are particularly evident in the outreach/replication phases. The multipliers and compounding multipliers in this phase are spectacular.
- ° Because of the magnitude of the multipliers in the program, the effects of reductions in funding are magnified at the same rate as the effects of funding. Relatively small economies build up large reservoirs of human and social problems which will have to be dealt with at a later date in a far more costly and less effective way.
- ° The opportunities of childhood will be gone.

That this complex program be funded and how it is funded are almost equally important. To argue that demonstration is more important than outreach is to misread the central dynamics of the program. Primarily it must be kept in mind that while demonstration is the beginning of the creative process, it is not the end of that process. Secondly, it must be kept in mind that the extraordinary productivity of the program is through replication, which is many times more effective than continuation in itself.

To understand the overall dynamics and productivity of this program, it must be seen not only as a three-year demonstration. It takes this long for demonstration projects to be developed and to become fully productive. During the first three years, the model innovation is developed in the narrow confines of an agency with a generally small group of children. In subsequent years, projects have the opportunity to operate in a broader world. In the continuation and replication phases, a project interacts with other programs, other needs, other people, in other places. Hence, innovation becomes richer, more practical and better known.

While the creative process continues, credibility and acceptance by the field develops. An idea has paid its historical dues. Now the climate of replicability enables the demonstration and outreach funding to pay off handsomely, and easily covers even the demonstration and outreach funding of

ideas that failed. Although outreach without demonstration is pointless, a case could be made that outreach is the more important of the two. Theoretically, outreach could be thought of as a luxury--a replicant could go to a demonstration site and replicate. The literature shows that this doesn't happen. Both the demonstration and outreach phases are needed and have complementary purposes.

Another problem arises when the cutback of funds forces a choice on whether to fund outreach for the proven competitive programs or the more recent developing programs. Selecting one or the other instead of both is counterproductive. By selecting the proven competitive programs, a cadre of 'regulars' tends to form. The advantage is immediate productivity. The disadvantage is a sort of institutionalization of HCEEP by making it a funding agency for ideas developed in the early 70's. There needs to be opportunity for later demonstration programs to enter outreach as the next wave of HCEEP innovation. Outreach is essential to keeping HCEEP as a catalytic force in continuing innovation. Both immediate productivity and future innovation need support to enable the HCEEP to be fully productive. Outreach, the channel between demonstration and replication, must not only exist at a substantial level but in substantial balance.

The developmental process of the HCEEP--with its sensitivity to innovation, to change, to the present and the future--is a finely tuned organism which merits both full and balanced funding. We know of no federal program which pays for itself so many times over.

Other Types of Output

There were other types of outputs which occurred as a consequence of

the demonstration/outreach projects. The other outputs included:

- Product development and distribution;
- Institutional change and,
- Unforeseen results.

Product Development and Distribution Output. One type of impact of the HCEEP is the development and dissemination of materials for use in planning, developing, evaluating, demonstrating and disseminating programming for young children with handicaps and their families.

The products generated by the 280 HCEEP projects are quite varied. The products include: curricula manuals; reports; newsletters and various project brochures, books, films, slide presentations, video-tapes and other audio-visuals; assessment methodologies and instruments; resource catalogs; workshop materials, etc.

The Western States Technical Assistance Resource (WESTAR) has assembled a catalog of products developed by HCEEP projects. The catalog is entitled What's Where?: A Catalog of Products Developed by HCEEP Projects (1980).⁵ An updated edition of this catalog dated 1982 lists approximately 3,000 products, many of which have been commercially published.

The following is a list of subject areas for which products have been developed:

- Activity guides
- Assessment
- Audiometry

⁵ What's Where?: A Catalog of Products Developed by HCEEP Projects (1980)
The Western States Technical Assistance Resource (WESTAR) 345 North Monmouth Avenue, Monmouth, Oregon 97361.

- Behavior Management
- Children's Books
- Child Development
- Child Find
- Cognitive Development and Programming
- Communication Development and Programming
- Communication Devices (Adaptive)
- Communication Handicaps
- Continuation Funding
- Curricula
- Day Care
- Developmentally Disabled
- Down's Syndrome
- Early Intervention (Rationale)
- Emotionally Disturbed
- Environment
- Evaluation (Program)
- Gifted and Talented
- Grief
- Group Homes
- Hearing Aids
- Hearing Impaired
- Home Programming
- Infant Perception
- Interagency Coordination
- Mainstreaming
- Mentally Retarded

- Moderately and Severely Handicapped
- Motor Development and Programming
- Observation
- Occupational Therapy
- Parent Attitudes
- Parent Education
- Parent Involvement
- Parent Needs Assessment
- Physical Education
- Physically Handicapped
- Product Development
- Program Development (Description)
- Program Guidelines
- Program Standards
- Public Awareness
- Rural
- Screening
- Self-Help Development and Programming
- Sensorimotor Development
- Spanish Language Materials
- Staff Needs Assessment and Competencies
- Teacher Attitudes
- Teaching Techniques
- Toilet Training
- Total Communication
- Toys and Games

Confirming evidence of the impact of the HCEEP in product development comes from Educational Products for the Exceptional Child which lists products developed by Bureau of Education for the Handicapped/Special Education Programs funded projects since 1967.⁶ Over a third of the volume is a listing of a wide variety of educational products for preschool handicapped children. Almost all of these products were developed through the HCEEP demonstration programs.

The other subject areas of this catalog, such as assessment, evaluation, measurement, personnel preparation, finance, productivity, management, etc., contain evidence that HCEEP projects have made numerous contributions to the state of the art in those areas as well.

Institutional Change Output. When asked to describe the changes which occurred in the community as a result of the HCEEP demonstration programs, the respondents offered several explanations. The changes described included:

- Stimulated family involvement/support advocacy;
- Stimulated education system change regarding the provision of services to young handicapped children;
- Stimulated legislative changes regarding the provision of services to young handicapped children;
- Changed community attitudes toward young handicapped children;

⁶ Educational Products for the Exceptional Child (1981). Prepared by Biospherics, Inc., Press, 2214 North Central at Encanto, Phoenix, AZ 85004.

- Established interagency relationships;
- Established interdisciplinary relationships;
- Expanded services to young handicapped children; and,
- Provided quality services in areas where none existed.

Unforeseen Output. Many of the products that were developed and the changes that occurred were predictable based on the demonstration models' philosophies. There were, however, products, results, and changes that were not predictable and constitute unexpected outcomes. When asked to describe unanticipated outcomes which were a consequence of the demonstration projects, the respondents offered the following:

- The high level of family involvement;
- The placement of children in regular programs;
- The growth of the program and expansion of services;
- The training of classroom consultants;
- The dissemination of information (local, regional, national, international);
- The establishment of a model program for the state;
- The establishment of a screening facility for the state;
- The replication of a program;
- The provision for observation by visitors (local, national, international);
- The development of a resource center; and,
- The development of a local and national early childhood network;

One of the program outcomes which could not have been predicted is the manner in which HCEEP technology is spreading to the larger field of exceptional childhood education. This can be seen on various levels:

- ° It has attracted the experts in the field and related fields (pediatric psychology, child psychology, etc.);
- ° It has attracted a wide variety of philosophies and educational systems.

Replication has had an unanticipated impact upon other agencies and systems. The interaction with Head Start has been extensive. Thirteen of the 15 agencies which have sponsored RAPs, or Resource Access Projects, the major entities charged with providing technical assistance and training in integrating children with handicaps in Head Start, have also sponsored HCEEP projects. The Seventh Annual Report of the U.S. Department of Health, Education, and Welfare to the Congress on the Status of Handicapped Children in Head Start Programs, 1980, generously credits other agencies for helping Head Start meet its mandate to fill 10 percent of its enrollment slots with children with handicaps.⁷ It states:

"Head Start has also sought--and been fortunate to receive--assistance from many other agencies. A principal ally has been the Bureau of Education for the Handicapped (BEH) and a set of BEH-funded projects scattered across the country. A spirit of collaboration has pervaded the Head Start handicapped effort--allowing Head Start to stretch its limited resources into major accomplishments."

⁷Page 34 U.S. Department of Health and Human Services, Office of Human Development Services Administration for Children, Youth and Families, Head Start Bureau, February, 1980.

Training is an important aspect of the work of HCEEP projects, particularly those in the Outreach phase. The scope of this training was larger than could have been predicted. A survey of results of the the work of the 64 outreach projects which were being supported during 1977 showed that 3,500 staff members were trained in the use of the models and 25,000 people requested and received some type of training from the outreach sites.⁸ In addition, 17,500 people visited the continuation sites which serve children and are sites for training.

Another unexpected outcome of HCEEP demonstration projects is the development of local, state and national consortia. Some examples of HCEEP State consortia include:

- Illinois First Chance Consortium - The primary goal of the Illinois First Chance Consortium is to improve the quality and quantity of services to the preschool handicapped population (ages birth-to-eight) in the state of Illinois through cooperative coordinated efforts. The impetus to achieve this goal comes from the individual member projects': 1) desire to impact on early childhood special education in Illinois,

⁸ Page x Handicapped Children's Early Education Program: 1981-82 Overview and Directory Produced by the Technical Assistance Development System (TADS) and the Western States Technical Assistance Resource (WESTAR) for Special Education Programs, U.S. Department of Education, February, 1982 under contract numbers 300-80-0752 and 300-80-0753, respectively.

- (2) need to fulfill their own goals and objectives, and 3) desire to have a forum to share common concerns and interests. The membership of the Consortium is composed of the currently funded HCEEP projects in Illinois. Projects whose federal funding has been discontinued and a representative from the Illinois Office of Education serve as ex-officio members of the Consortium. Each member project is represented by the project director and/or other designated person(s)
- Virginia Association of First Chance Projects - The Virginia Association of First Chance Projects (VAFCP) is comprised of the Virginia projects that have been funded by the HCEEP as demonstration programs for handicapped children from birth through eight years of age. The VAFCP was first organized in the Spring of 1976 for the purposes of: 1) stimulating high quality early intervention programs throughout Virginia; 2) increasing cooperation and coordination with the Virginia State Department of Education and the members of VAFCP; and 3) increasing communication among those individuals and agencies involved in early intervention. One of the activities of the association was a special project to develop procedures for assisting local school divisions in evaluating their own efforts to develop services for preschool handicapped children, and to coordinate the provision of technical assistance in the resulting areas of identified need. This project, known formally as the Preschool Evaluation Project (PEP), was jointly funded by grants from the HCEEP to the individual projects and funds from the Virginia Department of Education. The Needs Assessment Index (NAI) is the resulting document that was developed under PEP for determining the technical assistance needs of the local school divisions.
- Other State Consortia are:
 - California First Chance Consortium
 - Colorado HCEEP Consortium
 - Connecticut Early Childhood Special Education Network
 - Mississippi Early Services for the Handicapped
 - Teaching Texas Tots Infant Consortium

In addition to State consortia there are also special interest consortia. They include:

- Handicapped Children's Early Education Program's Rural Network - A Rural Network Task Force was established to identify the "best practices" for service delivery to rural handicapped children. The State-of-the-Art Task force has as its responsibility the collection and distribution of information related to effective strategies for delivering services to rural young handicapped children and their families. During 1980-81, a series of monographs was undertaken by contributors across the country. The first four publications were part of the "Making It Work in Rural Communities" series. These publications dealt with transportation, effective strategies for collecting cost data, influencing decision makers, and successful strategies used by rural programs for young handicapped children.
- Minority Leadership Consortium - The HCEEP Minority Leadership Consortium is comprised of minority project leaders and other interested minority professionals. The goals are two-fold: 1) to improve and increase services to minority handicapped children through the HCEEP, and, to that end, 2) to increase both the quantity and quality of minority professionals' involvement in the HCEEP.
- Other Special Interest Consortia are:
 - Interact - The National Committee for Services to Very Young Children with Special Needs and Their Families. HCEEP Urban Consortium.

The HCEEP has had unanticipated impact on the fields of early childhood education, child development, pediatrics, psychology and special education through the sponsorship of an annual conference on early childhood/special education. For the last two years, this conference has been sponsored jointly with the Division for Early Childhood of the Council for Exceptional Children and the attendance has reached 700, with numerous requests for copies of proceedings documents. The National Center for Clinical Infant Programs is currently represented on the planning committee for the next conference.

CHAPTER FOUR: RANDOM SAMPLE OF HCEEP DEMONSTRATION PROJECTS

A. Purpose and Selection Process

One of the tasks outlined in the work scope as part of the analysis of the impact of the HCEEP was to visit a random sample of 14 projects: 6 projects reported as continuations, 6 reported as replications and 2 reported as replications of JDRP approved projects. This task was included in order to: 1) verify through site visits the extent to which the original demonstration models are being continued, 2) verify through site visits the extent to which reported replication programs are in fact implementing all or components of the original demonstration models, and 3) determine the number of children being served.

Using a table of random numbers, 20 HCEEP demonstration projects were selected. The work scope indicated that the projects outside of the continental United States should be excluded from the selection process because of travel cost. Lists of the reported replications of the 20 randomly selected projects were obtained, and a random group of continuation and replication sites were visited. The site visits were conducted by professional members of the contractor's staff. Procedures for the visits are described first, then the characteristics of the projects.

B. Site Visit Procedure

Prior to the on-site visits, the project files of the selected sites (continuation projects) and the demonstration models being replicated (replication projects), were reviewed. The abstracts and/or proposals of

the original demonstration models were studied in order to determine whether the continuation and replication projects visited are fundamentally like the original models.

Continuation Sites. Six continuation sites were randomly selected from the random sample of 20 HCEEP demonstration projects. The site visits were made in order to: 1) document the projects' history as grantees of the HCEEP and obtain a description of the present programs, 2) determine whether the models are still fundamentally like the models developed during the demonstration phase, 3) determine whether the models are still serving children and how many children are being served, and 4) observe the program in operation.

The 6 continuation sites are located in the following states: Georgia, Illinois, New York, North Carolina, Pennsylvania, and Texas. The following is a summary of basic information obtained during the site visits.

All 6 continuation sites are still fundamentally like the descriptions of the demonstration models contained in the project abstracts and/or proposals. The curriculum and basic procedures which were developed by the demonstration projects were seen to be in use in the continuation sites. Table 20 presents a comparison of the demonstration and present models of the 6 continuation projects. This table is shown on the following page.

* The table of random numbers and the listing of the projects selected by the use of this table are on file in the program office, Special Education Programs.

Table 20

Comparison of Demonstration and Present Models
of Six Continuation Projects

Project	<u>Demonstration Models</u>		<u>Continuation Models</u>	
	<u>Ages of Children</u>	<u>No. of Children Served During 3 Years</u>	<u>Ages of Children/No. of Children</u>	
Site 6	0 - 8	170	0 - 18*	183
Site 14	3 - 5	63	3 - 5	103
Site 2	0 - 6	290	0 - 6	190
Site 20	4 - 6	24	4 - 5	7
Site 5	1 - 6	200	0 - 6	150
Site 1	3 - 5	1278	3 - 7	400(+)

As shown in Table 20, the ages of the children served by the 6 continuation projects' demonstration models ranged from 0 - 8, while the age range for the present models is 0 - 18.* Also, the number of children during the demonstration period ranged from 24 to 1278, while the number of children being served by the present models range from 7 to over 400 in 1981-1982.

Table 21 presents a summary of the grants received from the HCEEP and other components of the Department of Education, by the 6 continuation sites. The table is shown below.

* Procedures and materials developed by demonstration projects are sometimes adapted for use with older severely delayed children.

Table 21

Grants Received from the HCEEP and Other Components
of The Department of Education By Six Continuation Projects

<u>Project</u>	<u>Demo. Grant</u>	<u>Outreach Grant</u>	<u>*JDRP Approval</u>	<u>**NDN Grant</u>
Site 6	1970-1973	1973 to present	1979	1981
Site 14	1970-1973	1973 to present	1975	1978-1981
Site 2	1972-1974	1975 to 1976	N/A	N/A
Site 20	1977-1980	N/A	N/A	N/A
Site 5	1973-1975	1976 to 1979	N/A	N/A
Site 1	1974-1977	N/A	N/A	N/A

* JDRP - Joint Dissemination Review Panel; ** - National Diffusion Network

As shown in Table 21, four of the 6 continuation projects received outreach grants from the HCEEP. Two of the four projects have received outreach funding up to the present (1981-1982). Also, these same projects have received approval by the JDRP (exemplary status) and have received grants from the NDN.

The on-site observations of the 6 continuation projects in operation are briefly described below. These observations included the following types of activities:

- Music therapy;
- Art therapy;
- Project time (child working on individual project)
- Academic activity related to snack times;
- Academic activity (teacher directed);
- Group therapy;
- Individualized instruction;

- Supervised group activities; and,
- Structured independent play activities.

During the observations several factors were noted. These included: the types of facilities and their location, the atmosphere in which children were observed, and the adequacy of space.

- The types of facilities observed were center classroom settings, school classroom settings, playground settings, a basement of a large apartment complex, a large mansion-type home, and a building complex.
- The atmosphere of facilities in which children were observed ranged from learning oriented stimulation (e.g., classroom decorations) through purposefully designed settings (including absence of stimulation).
- The space available to children ranged from small rooms to large spaces that were adequate; however, the programs with less than adequate spaces demonstrated creative and purposeful use of space available.

Replication Sites. Six replication sites were randomly selected from the random sample of 20 HCEEP demonstration projects. Site visits were made in order to obtain basic information, including: 1) documenting the replication process, 2) determining whether the services provided are fundamentally like those described by the demonstration models replicated, 3) determining the number of children being served by the replication sites, and 4) observing the program in operation.

The 6 replication sites are located in the following states: California, Colorado, Florida, Georgia and Ohio. The following is a summary of basic information obtained during the site visits.

All 6 replication sites reported being assisted by the demonstration projects being replicated. Also, all sites perceived this assistance as valuable. The 6 replication sites are providing services that are fundamentally like those described by the demonstration models being replicated.

Table 22 presents a comparison of the demonstration and present models of the 6 replication projects. This table is shown below.

Table 22
Comparison of Demonstration With Replication
Model of Six Replication Projects

Project	<u>Demonstration Model Replicated</u>		<u>Replication Program</u>	
	<u>Ages of Children</u>	<u>No. of Children Served During 3 Years</u>	<u>Ages of Children/No. of Children</u>	
Site 18	0 - 2	44	0 - 4	30
Site 14	3 - 5	63	3 - 5	20
Site 6	0 - 8	170	0 - 18**	408
Site 3	0 - 5	279	2 - 4	375
Site 16	0 - 5	55	2 - 28	100
Site 6	0 - 8	170	0 - 18**	144

As shown in Table 22, the ages of the children served by the demonstration models ranged from 0 - 8, while the age range of children in the replication programs is 0 - 28.* Also, the number of children served by the

* Severely emotionally disturbed.

** Procedures and materials developed by demonstration projects are sometimes adapted for use with older severely delayed children.

the demonstration models ranged from 44 - 279, while the number of children served in the replication programs range from 20 - 408.

The on site observations of the 6 replication projects in operation are briefly described. These observations included the following types of activities:

- Recreational therapy;
- Language Therapy;
- Group Counseling;
- Academic Activity-structured and independent;
- Science activity;
- Free activity; and,
- Teenage mothers involved in child care of their own child.

During the observations several factors, including the types of facilities and their location, the atmosphere in which children were observed, and the adequacy of space were noted.

- The types of facilities observed were center classroom settings, school classroom settings, and playground settings.
- The atmosphere of facilities in which children were observed ranged from learning-oriented stimulation (e.g., classroom decorations), through purposefully designed settings (including absence of stimulation).
- The size and adequacy of the facilities varied considerably.

C. Input Analysis of Twenty Randomly Selected HCEEP Demonstration Projects

Because of the size of the randomly selected sample of 20 projects, it was possible to provide more detailed information on the impact of this sub-group. These factors were analyzed first:

1) type of agencies funded, geographical distribution of agencies funded (states and territories), 3) service areas funded (urban, rural), 4) service delivery settings funded (home-based, center-based), 5) types of handicapping conditions funded, 6) types of treatment modalities funded, 7) number of children served, 8) ages of children served, and 9) amount of funds allocated and generated.

Type of Agency Sponsors of Twenty Randomly Selected HCEEP Demonstration Projects

The primary types of fiscal agency sponsors for the 20 randomly selected HCEEP demonstration projects are presented in Table 23. This table is shown below.

Table 23

Agency Sponsors for Twenty Randomly Selected
HCEEP Demonstration Projects

<u>Type of Agency Sponsor</u>	<u>Number of Demon. Projects</u>	<u>Percent</u>
Private, Nonprofit Organizations	7	35.0
Institutions of Higher Education (non-medical)	7	35.0
Local Education Agencies (LEAs)	3	15.0
Public Agencies	2	10.0
Hospitals	1	5.0
TOTAL:	20	100.0

As shown in Table 23, the 20 randomly selected HCEEP demonstration projects are divided evenly between private, non-profit organizations and institutions of higher education of a non-medical nature, followed by LEAs (public schools), public agencies and hospitals.

Geographic Distribution of Twenty Randomly Selected HCEEP Demonstration Projects

The geographic distribution of the 20 randomly selected HCEEP demonstration projects is presented in Table 24. This table is shown below.

Table 24
Geographic Distribution of Twenty Randomly Selected
HCEEP Demonstration Projects

<u>State</u>	<u>Number of HCEEP Projects</u>
Alabama	1
California	1
Florida	1
Georgia	1
Illinois	1
Michigan	2
Mississippi	2
North Carolina	2
New York	3
Ohio	1
Pennsylvania	1
Texas	1
Virginia	1
Washington	1
West Virginia	1
TOTAL:	20

As shown in Table 24, the 20 randomly selected HCEEP demonstration

projects were distributed in 15 states, a wide geographic distribution. The state of New York has the largest number of HCEEP demonstration projects in the random group of 20. Michigan, Mississippi and North Carolina have an equal number of demonstration projects (2 each). The other states are represented in the random group of 20 by 1 project each.

Urban/Rural Distribution

The service areas of the 20 randomly selected HCEEP demonstration projects are presented in Table 25. This table is shown below.

Table 25

Urban/Rural Distribution of Twenty Randomly Selected HCEEP Demonstration Projects

<u>Type of Service Area</u>	<u>Number of Demo Projects</u>	<u>Percent</u>
Urban	8	40.0
Rural	7	35.0
Urban & Rural	<u>5</u>	<u>25.0</u>
TOTAL:	20	100.0

As shown in Table 25, services are provided almost equally in both urban and rural areas.

Service Delivery Settings of Twenty Randomly Selected HCEEP Demonstration Projects

The service delivery settings of the 20 randomly selected HCEEP demonstration projects are presented in Table 26 on the following page.

Table 26

Service Delivery Settings of Twenty Randomly Selected
HCEEP Demonstration Projects

<u>Service Delivery Setting</u>	<u>Number of Demo. Projects</u>	<u>Percent</u>
Home and Center Based	10	50.0
Center Based	9	45.0
Home Based	<u>1</u>	<u>5.0</u>
TOTAL:	20	100.0

As shown in Table 26, the largest number of the 20 randomly selected projects deliver services in home and center-based programs. Next is center-based only programs, followed by a home-based only program.

Types of Handicaps Addressed by Twenty Randomly Selected HCEEP Demonstration Projects

The handicapping conditions addressed by the 20 randomly selected HCEEP demonstration projects are presented in Table 27. This table is shown on the following page. It is noted that all projects reported serving groups of children representing more than one type of handicap.

As shown in Table 27, a variety of handicapping conditions were addressed by the random group of 20 demonstration projects. The majority of the projects served both mentally retarded and multi-handicapped children. Next was speech impaired followed by orthopedically impaired and the visually handicapped. The seriously emotionally disturbed and specific learning disabled, other health impaired and deaf-blind, and the hard of hearing and deaf were addressed an equal number of times.

Table 27

Handicaps Addressed by Twenty Randomly Selected
HCEEP Demonstration Projects

<u>Handicaps</u>	<u>Number of Demo. Projects</u>	<u>Percent</u>
Mentally Retarded	15	75.0
Multi-handicapped	15	75.0
Speech Impaired	13	65.0
Orthopedically Impaired	12	60.0
Visually Handicapped	9	45.0
Seriously Emotionally Disturbed	8	40.0
Specific Learning Disabilities	8	40.0
Other Health Impaired	6	30.0
Deaf-Blind	6	30.0
Hard of Hearing	5	25.0
Deaf	5	25.0
Developmentally Delayed	2	10.0
Total Number of Projects: 20		100.0

Types of Treatment Modalities Used by Twenty Randomly Selected HCEEP
Demonstration Projects

Basic treatment modalities used by the 20 randomly selected HCEEP demonstration projects are presented in Table 28. This table is shown on the following page. It is noted that several projects reported combinations of treatment approaches. The majority of the group of 20 randomly selected projects used a diagnostic prescriptive treatment approach.

Table 28

Treatment Approaches Used By Twenty Randomly Selected
HCEEP Demonstration Projects

<u>Treatment Approach</u>	<u>Number of Demo. Projects</u>	<u>Percent</u>
Diagnostic Prescriptive	17	85.0
Behavioral	4	20.0
Language/Communication	3	15.0
Montessori	1	5.0
Total Number of Projects: 20		

Children Served By Twenty Randomly Selected HCEEP Demonstration Projects

The number of children served for the three-year period, by the 20 randomly selected HCEEP demonstration projects, is presented in Table 29. This table is presented on the following page.

Several noteworthy facts are illustrated in Table 29, the number of children served by the randomly selected HCEEP demonstration projects. There were a total of 3,524 children served by all projects. The number of children served ranged from 24 to 1,278. The average number of children served by the 20 randomly selected projects was 176.3, that is, 58.8 per year.

Table 29
Children Served by Twenty Randomly Selected
HCEEP Demonstration Projects

<u>Demonstration Project</u>	<u>Number of Children Each Year</u>	<u>Total</u>
Site 1	250-250-778*	1278
Site 2	60-110-120	290
Site 3	57- 72-150	279
Site 4	57- 72-150	279
Site 5	50- 75- 75	200
Site 6	24- 27-119	170
Site 7	41- 55- 55	151
Site 8	35- 40- 42	117
Site 9	17- 45- 45	107
Site 10	21- 27- 56	104
Site 11	19- 18- 50	87
Site 12	21- 25- 55	71
Site 13	30- 12- 24	66
Site 14	15- 25- 23	63
Site 15	20- 20- 20	60
Site 16	11- 14- 30	55
Site 17	16- 16- 20	52
Site 18	9- 11- 24	44
Site 19	6- 7- 15	28
Site 20	8- 8- 8	24

Total Number of Children Served by 20 Projects: 3524
Average Number of Children Served by 20 Projects: 176.3
Average Number of Children Served per year: 58.8

* Project conducted in three sites with substantial local funding contributions

Ages of Children Served By the Twenty Randomly Selected HCEEP Demonstration Projects

The age ranges of the children served by the 20 randomly selected HCEEP demonstration projects are presented in Table 30. This table is shown below.

Table 30

Age Range of Children Served By The Twenty Randomly Selected
HCEEP Demonstration Projects

<u>Age Ranges</u>	<u>Number of Demonstration Projects</u>	<u>Percent</u>
0 - 3	2	10.0
0 - 5	5	25.0
0 - 8	2	10.0
0 - 6	1	5.0
1 - 6	1	5.0
2 - 7	1	5.0
3 - 5	7	35.0
4 - 6	<u>1</u>	<u>5.0</u>
TOTAL:	20	100.0%

As shown in Table 30, half of the randomly selected projects provide services to children beginning at age 0. The age range served most frequently is 3 - 5.

Amount of Funds Allocated To The Twenty Randomly Selected HCEEP Demonstration Projects

The amount of money allocated to the randomly selected HCEEP demonstration projects for the three-year period is presented in Table 31. This table is shown below. It is noted that the funding is being reported in thousands of dollars.

Table 31

Funds Allocated to Twenty Randomly-Selected
HCEEP Demonstration Projects

<u>Amount of Funding Each Year</u>	<u>Total</u>
100- 85-250	435
97-124-125	346
60-123-130	313
68-128-111	307
60-110-120	290
70- 99-119	288
74- 92-117	283
61- 98-123	282
60-110-110	280
50-110-110	270
66-100-101	267
56-101-104	261
25-118-118	261
35- 90-131	256
60- 92-100	252
68- 79-105	252
60- 82- 84	226
60- 83- 83	226
60- 83- 83	226
50- 83- 70	203

Total amount of funds allocated: \$5,524,000

Average amount of funds allocated per agency per year: \$92,067

As shown in Table 31, a total of \$5,524,000 was awarded to the collective

group of 20 randomly selected projects. The average yearly amount of funds allocated each agency is \$92,067. The amount of funding for the three-year demonstration period ranged from \$203,000 to \$435,000.

D. Output Analysis of Twenty Randomly Selected HCEEP Demonstration Projects

The second group of factors analyzed for the 20 randomly selected HCEEP demonstration projects was the output factors. The primary output factors are: 1) continuation output, 2) direct outreach output, 3) replication output, and 4) other types of output.

Continuation Output. Eighty percent of the 20 randomly selected demonstration projects were able to obtain continuation funding. Table 32 presents the projects which were able to obtain local funding. This table is shown on the following page.

Table 32

Projects Receiving Local Continuation Funds
Of Twenty Randomly Selected HCEEP Demonstration Projects

<u>Demonstration Projects</u>	<u>Received Continuation Funding</u>	<u>Were Not Continued</u>
Site 1	Yes	
Site 2	Yes	
Site 3	Yes	
Site 4	Yes	
Site 5	Yes	
Site 6	Yes	
Site 7		No
Site 8		No
Site 9		No
Site 10	Yes	
Site 11		No
Site 12	Yes	
Site 13	Yes	
Site 14	Yes	
Site 15	Yes	
Site 16	Yes	
Site 17	Yes	
Site 18	Yes	
Site 19	Yes	
Site 20	Yes	
TOTAL:	16	4

As shown in Table 33, 16 of the 20 randomly selected demonstration projects were able to obtain continuation funding. The number of children served during the first year of continuation is presented in Table 33. This table is shown below.

Table 33
Children Served in First Year of Continuation
By Sixteen Agencies Continued

<u>Continuation Sites</u>	<u>Number of Children Served</u>
1	800
2	130
3	150
4	150
5	75
6	125
10	160
12	58
13	30
14	32
15	20
16	30
17	20
18	25
19	20
20	8

TOTAL: 1733

AVERAGE: 108.3

RANGE: 8-800

As shown in Table 33, a total of 1733 children were served during the first continuation year. The average number of children served during the first continuation year was 108.3.

The amount of funds generated by the 16 continuation agencies during the first year of continuation is presented in Table 34. This table is shown below.

Table 34

First Year Funding For Sixteen
Continuation Agencies (By Thousands)

Funding Levels

\$351

250

210

130

125

124

118

101

100

100

100

90

84

64

50

36

Average Funding Level: 127

10x

As shown in Table 34, the amount of funds generated by the 16 continuation agencies, during the first year of continuation, ranged from \$36,000 to \$351,000. The average funding level was \$127,000.

Direct Outreach Output

Table 35 presents the projects receiving outreach funding from the HCEEP. This table is shown on the following page. As shown in Table 35, 10 of the 20 randomly selected demonstration projects elected to apply for and received, outreach funding from the HCEEP.

The following summaries of selected projects providing outreach services are presented to illustrate the nature of outreach services and the impact of these projects.

Site 6:

This project stimulates increased, specialized, high quality services to emotionally disturbed and other handicapped preschool children and parents, and teachers. Technical assistance is provided to target audiences and individuals. A developmental therapy model is used. Six manuals have been produced and more than 800 people trained. Training is provided to professionals, paraprofessionals, volunteers, teachers, and parents.

Site 14:

This project provides a center-based program for handicapped children and their families. In addition to pre- and posttest data on all children, teachers assess each child's abilities, set individualized goals and objectives, teach and continually evaluate child progress. The project has

Table 35

**Projects Receiving Outreach Funding of Twenty
Randomly Selected Demonstration Projects**

<u>Demonstration Projects</u>	<u>Received Outreach Funding</u>	<u>Did Not Receive Outreach Funding</u>
Site 1		No
Site 2	Yes	
Site 3		No
Site 4	Yes	
Site 5		No
Site 6	Yes	
Site 7		No
Site 8	Yes	
Site 9		No
Site 10		No
Site 11	Yes	
Site 12		No
Site 13	Yes	
Site 14	Yes	
Site 15	Yes	
Site 16	Yes	
Site 17	Yes	
Site 18		No
Site 19		No
Site 20		No
TOTAL:	10	10

produced numerous handouts and manuals. There is a quarterly newsletter and a conference held annually. Over 160 people have been trained and 15 awareness workshops conducted. Training is provided to teachers, paraprofessionals, and parents.

Site 8:

This project's focus was to demonstrate the organization, development, and implementation of an early education program designed to serve educable mentally retarded children and their families from rural and inner city areas. The products developed include video-tapes and slides. The project design required a minimum of two conferences with a training workshop. Technical assistance was provided to 12 preschool programs serving handicapped children. Training was provided to more than 500 staff members involved in preschool and early education of the handicapped.

Site 13

The training focus was placed upon mobilizing the strengths, knowledge, and skills of parents. The products developed include six manuals and three video-tapes. More than 2,400 infants have been screened, with 1,551 provided with direct and comprehensive services. There are presently more than 2,800 parents and family members actively involved.

Site 2:

The outreach project has grown into a technical assistance network for an entire state. It has 23 project centers. It provides services through teachers and aides to 1,515 children annually. The project has created a wide range of materials, manuals, and films in its education effort.

Site 5:

This private, nonprofit agency's demonstration project treated a broad range of handicapped children using an Adlerian approach. One county has adopted the model and the agency is now the primary agency for the treatment of handicapped children. About 80 children a year receive home/center based services.

Site 16:

The project has developed a responsive environment model for the habilitation and education of severely and profoundly handicapped young children. The model consists of professional and caregiver assessment, programming, caretaking, physical environment, and evaluation components. The program has developed three manuals and an assessment instrument. Also, workshops and training classes have been conducted for more than 300 professionals and paraprofessionals.

Site 17:

This project provided training in two community service models designed for moderately to profoundly handicapped children. One is an infant/child home educational model with parents as teaching agents for children 0-4. The second is a data-based preschool program model for children 4-8 with developmental ages 2-4. The products developed include curriculum and assessment instruments. Three levels of training were provided to more than 290 people. Parents and service personnel were trained.

Replication Output

Sixty percent of the 20 randomly selected demonstration projects listed programs which are replicating all or parts of their model. Table 36 presents

the project and the number of replication programs which were listed. This table is shown on the following page.

As shown in Table 36, 12 of the 20 demonstration projects listed replication programs. A total of 259 replication programs were listed by these 12 projects. Three distinctions are made with regard to non-response by projects. They are: 1) projects stating none, i.e., no replications; 2) projects stating not available, i.e., there are replications but this information could not be retrieved; and 3) projects not listing any information, i.e., did not respond to item requesting the listing of replication programs. The number of projects stating none was four, the number stating not available was one, and the number not listing any information was three. The average number of replications generated by these 12 projects was 21.5.

The workscope for the contract called for study of 40 randomly selected replications of the sample of 20 demonstration projects. The following section provides a description of the 40 replication programs. Table 37 presents a summary of these programs based on: 1) whether they considered themselves replications of the demonstration model, 2) whether they are using the curriculum and services to children component, 3) the number of handicapped children served, 4) the age range of children served, and 5) the types of handicapping conditions addressed. This table is shown on the following page. It is noted that replication programs are listed by random selection order, by State abbreviation, rather than by name. Also, the abbreviations for the handicapping conditions are presented below.

Table 36

Number of Replications Listed By Twenty Randomly
Selected Demonstration Programs

<u>Demonstration Projects</u>	<u>Number of Replication Programs Listed</u>
Site 1	Not available
Site 2	20
Site 3	1
Site 4	Did not list any
Site 5	None
Site 6	51
Site 7	Did not list any
Site 8	5
Site 9	None
Site 10	1
Site 11	1
Site 12	Did not list any
Site 13	54
Site 14	111
Site 15	3
Site 16	2
Site 17	5
Site 18	5
Site 19	None
Site 20	None

Table Summary:

<u>No. Projects Listing Replic.</u>	<u>No. Replications Listed</u>	<u>Projects Stating None</u>	<u>Projects Stating Not Available</u>	<u>Projects Not Listing</u>
12	259	4	1	3

MR	=	Mentally Retarded
HOH	=	Hard of Hearing
D	=	Deaf
SI	=	Speech Impaired
VH	=	Visually Handicapped
SED	=	Seriously Emotionally Disturbed
OI	=	Orthopedically Impaired
OHI	=	Other Health Impaired
SLD	=	Specific Learning Disabilities
DB	=	Deaf/Blind
MULTI	=	Multi-Handicapped (a child has 2 or more handicaps)
G & T	=	Gifted and Talented

As shown in Table 37, all 40 of the replication programs consider themselves as having replicated the demonstration model and report using the curriculum and services to children component of the model. The number of children served by the replication programs range from 1 to 1350. The total number of children served by the 40 replication programs is 3153. The average number of children served is 78.8. The ages of the children served range from 0 to 28* years. Also, a variety of handicapping conditions are addressed by the replication programs.

The 40 replication programs were asked whether the factors listed below were "critical", "important" or "not important" to their decision to replicate the demonstration model. Table 38 shows the responses.

* Seriously emotionally disturbed.

Table 37

Summary of Basic Facts About The Forty Replications Of
The Twenty Randomly Selected Demonstration Projects

Replicated Model		Curriculum & Services to Children Component	No. of Children	Ages	Handicaps
WV	Yes	Yes	8	5-7	MR, OHI, MULTI
CA	Yes	Yes	1	0-2	MR
FL	Yes	Yes	24	3-5	MR, OI, MULTI
OH	Yes	Yes	104	13-28	MULTI
IL	Yes	Yes	40	3-6	MR, SI, SLD, MULTI
IL	Yes	Yes	40	3-5	MR, MCH, ST, OI, SLD
IL	Yes	Yes	72	3-5	OHI, SLD, MULTI, S, MR MCH, ST, SLD, OI
IL	Yes	Yes	1350	3-21	All listed conditions
IL	Yes	Yes	11	3-7	MR
MO	Yes	Yes	60	4-6	MR, SI, SLD, MULTI
MI	Yes	Yes	31	0-5	MR, ST, OI, OHI, SLD
AR	Yes	Yes	25	3-5	MR, SI, MULTI
WI	Yes	Yes	20	3-5	MR, SI, MULTI
NY	Yes	Yes	25	3-6	MULTI
MI	Yes	Yes	180	5-6	SI, OHI, SLD
OH	Yes	Yes	180	5-6	SI, OHI, SLD
OH	Yes	Yes	60	3-5	OI, OHI
OH	Yes	Yes	25	4-6	MR, SI, VM, SED, SLD, MULTI
CO	Yes	Yes	25	4-7	MCH, ST, VH, SLD, MULTI
CO	Yes	Yes	12	5-6	MULTI, MR, VH, SED, OI, OHI, SLD
CO	Yes	Yes	24	3-5	OHI, SLD, MULTI, GAT, OI MR, MCH, D, SI, VH, SED
LA	Yes	Yes	24	3-5	MR, SI, VH, SED
MI	Yes	Yes	55	4-12	MR, SI, SED, SLD, MULTI
CA	Yes	Yes	70	5-13	SED, SLD, MULTI
CO	Yes	Yes	75	4-8	MR, SI, SED, SLD
CT	Yes	Yes	28	3-15	SED, MULTI
GA	Yes	Yes	21	6-13	SED, SLD
NE	Yes	Yes	20	5-12	SED
NE	Yes	Yes	15	6-2	SED
MI	Yes	Yes	32	4-6	MR, SI, SED, OHI
MI	Yes	Yes	53	4-9	MR, MCH, D, ST, SED, MULTI
MI	Yes	Yes	30	3-7	SLD, MULTI, MR, MCH, D, SI, VH, SED
NY	Yes	Yes	9	5-6	MR, SED, MULTI
NC	Yes	Yes	11	3-7	SED
NC	Yes	Yes	12	3-6	SED
NC	Yes	Yes	20	3-6	SED
NC	Yes	Yes	20	3-6	SED
NC	Yes	Yes	17	3-5	MULTI, MCH, SI, SED, OI, SLD
PA	Yes	Yes	250	3-5	SLD, MR, MCH, D, SI, SED
SC	Yes	Yes	65	6-12	SED

Table 38

Factors Rated As Critical To Decision To Replicate
Demonstration Model By 40 Replication Programs

<u>Factors</u>	<u>Number of Replications Listing As Critical</u>	<u>Percent</u>
1. Availability of training from experienced model staff	22	55.0
2. Availability of help to diagnose the strengths and weaknesses of your situation	20	50.0
3. You felt the choice of this model was voluntary	20	50.0
4. Model served a previously unmet need	19	47.5
5. Model appropriate to your population and staff	19	47.5
6. You could control the nature of the program you were adopting and adapt the model	18	45.0
7. Personal/professional relationship with model staff	18	45.0
8. Model of proven quality	17	42.5
9. You had trust in the model	17	42.5
10. Model matches your philosophy and is locally acceptable	16	40.0
11. Availability of resources from National Diffusion Network	14	35.0
12. Model easily demonstrable in its effects	13	32.5
13. Availability of help to develop estimates of the amount of time and help from model project. Clear understanding of when you were to be "on your own"	12	30.0
14. Willingness of model staff to help you sell the concept to policy or financial decision makers	10	25.0
15. Model not too costly compared to benefits	9	22.5
16. Model provides information on cost and staffing needed to replicate	2	5.0

As shown in Table 38, the factor considered most critical to the decision to replicate the model is the availability of training from experienced model staff. Next, both the availability of assistance in diagnosing their own situation, as well as the feeling that the choice of the model is voluntary is viewed as critical by the 40 replication programs. The ability of the model to meet an unmet need and its appropriateness to the population and staff are seen as equally important. Also the ability to control and adapt the model and developing personal/professional relationships with model staff are viewed as equally important. Two related factors were viewed as equally important; the proven quality of the model and having trust in the model. Also viewed as critical to the decision to replicate the demonstration model are: the model matching program's philosophy, the availability of resources from the National Diffusion Network, the model easily demonstrable in its effects, clear understanding of when help would no longer be available, willingness of model staff to help sell the concept to policy or financial decision makers, cost/benefit ratio acceptable, and model provides information about cost and staffing needed to replicate.

Other Types of Output

There were other types of outputs by the 20 randomly selected demonstration projects. These other outputs included:

- Product development and distribution;
- Institutional change; and,
- Unforeseen results.

Product Development and Distribution Output. The basic products are quite varied. The products include: curriculum manuals; reports; newsletters and various project brochures, books, films, slide presentations, video-tapes

and other audio-visuals; assessment methodologies and instruments; resource directories, workshop materials, etc.

Institutional Change Output. The institutional change output category refers to changes which occur in local areas as well as nationally as a result of the HCEEP demonstration project. The types of institutional changes reported by the 20 randomly selected projects are presented in Table 39, below.

Table 39

Categories of Institutional Change Reported By
Twenty Randomly Selected Demonstration Projects

<u>Types of Institutional Change Cited</u>	<u>No. of Demo Projects</u>	<u>Percent</u>
Raised Level of Community Awareness	20	100.0
Various Facets of Professional Community Working Together	20	100.0
Developed Assessment Instruments	14	70.0
Training Site	11	55.0
Used as Observation Site	7	35.0
Developed Model Used by State & Other States	3	15.0
State Legislation	2	10.0
Expansion of Services to a Young Population	2	10.0

As shown in Table 39, all of the 20 randomly selected projects reported that their programs were instrumental in raising the level of community awareness about the capability of young handicapped children to learn and achieve. Also, all projects report that various facets of the professional community, such as the educational community, medical community, and social services, worked together as a result of their programs. Seventy percent of

the projects report developing some type of assessment instrument. Over half of the projects report being used as a training site which includes observation by visitors. A significant point is the fact that several projects report developing models which were used by their states as well as by other state programs. Perhaps most noteworthy is the fact that some of the projects were instrumental in influencing their State's legislation with regard to the provision of services to handicapped children and their families.

Unforeseen Output. The unforeseen output category refers to the things which occurred in local areas as well as nationally as a result of the HCEEP demonstration project which were not among the original objectives and are seen as unanticipated outcomes. The types of unexpected outcomes reported by the 20 randomly selected demonstration projects are presented in Table 40. This table is shown on the following page.

Table 40

Categories of Unforeseen Outcomes Reported
By Twenty Randomly Selected Demonstration Projects

<u>Type of Unforeseen Outcomes Cited</u>	<u>No. of Demo. Projects</u>	<u>Percent</u>
Training Personnel and Students	11	55.0
Presentations at Local, Regional, National Conf.	8	40.0
Observation Site Including International Visitors	7	35.0
Dissemination of Assessment Instruments, Including in Europe	6	30.0
Community Volunteers	2	10.0
Influenced State Legislation	2	10.0
Model Replicated Throughout Country	2	10.0
Development of Other Projects	2	10.0
Co-Sponsorship of Community Program	2	10.0
Staff Training Model Marketed	1	5.0

As shown in Table 40, over half of the 20 randomly selected projects provided training for various staff personnel including students (e.g., teachers, aides, early childhood special educators, nursing students, psychology students, etc.). Also, many of the projects made presentations at local, regional and national conferences, and served as an observation site for local, national and international visitors. Noteworthy is the fact that several of the projects developed assessment instruments which were widely distributed, including distribution abroad. Also, some projects reported

initiating use of community volunteers who were retired teachers and other professionals. There were several other significant factors: 1) some of the projects influenced their state legislatures regarding the provision of services to young handicapped children and their families, 2) some projects' demonstration model was replicated by other programs throughout the country, 3) some of the projects' demonstration model allowed them to develop other programs (e.g., projects funded by the Division of Personnel Preparation, a National Diffusion Network Developer-Demonstrator project), and 4) some of the projects sponsored activities with other community programs. Also, one project reported developing a staff training model that was nationally marketed.

CHAPTER FIVE: HCEEP PROJECTS APPROVED BY THE JOINT DISSEMINATION REVIEW PANEL

A. Purposes and Procedures of The Joint Dissemination Review Panel

The following description was taken from Guidelines: The United States Department of Education Joint Dissemination Review Panel Purposes, Procedures, and Criteria (effective 3/2/82). The Federal government established the Joint Dissemination Review Panel (JDRP) in 1972, as a means of assuring that the educational products and practices disseminated are effective. The Panel's policies have changed over the years in that

"initially, the JDRP reviewed evidence about products and practices that were developed with funds provided solely by Federal agencies. The JDRP now also reviews evidence of effectiveness of potential exemplary products and practices developed with funds provided by the State or local government or a private, nonprofit organization, including private educational organizations. The Panel serves as a major internal quality control mechanism for the financially supported dissemination activities of the Department of Education."

The Panel's primary function is to review evidence of effectiveness of education products and practices proposed for dissemination by Program Offices within the Department of Education. The JDRP does not make decisions regarding which products and practices will be reviewed. The nominations for submission to the JDRP

"can occur in two ways, depending on the program's source of developmental funding: (1) through the Department of Education's Program Offices (including the Secretary's Regional Representatives) or (2) its National Diffusion Network Division if the products and practice were developed by another Federal agency, or any State or local government or nonprofit, private organization. Decisions on how to disseminate Panel approved products and practices are left to the sponsoring agencies and offices. Furthermore, the

Panel does not recommend or review any proposed dissemination strategies. The Panel is interested primarily in the claims of effectiveness of the program for which exemplary status is being sought through the Program Officers' and developers' presentation of compelling and objective evidence pertaining to those claims."

The educational products and practices submitted to the JDRP have included the following areas: compensatory education, environmental education, reading, mathematics, bilingual education, preschool, special and higher education.

The JDRP considers such common sense questions as these:

- ° How well did the students or other target groups perform before they either used the product or were involved in the practice in question, and how well did they perform after experiencing it? For example, are there measures which show gains or improvements?
- ° Are the gains statistically reliable?
- ° If there is any evidence of change or improvement, is the gain or improvement large enough to be meaningful? Is it large enough to be both statistically reliable and educationally significant?
- ° Is there evidence that the improvements claimed by the program are stable and generalizable to other educational settings? Are the improvements the result of special characteristics of the particular groups who used the product or practice? Was the unusual competence of the teachers who used the products or practices responsible for the gain? These considerations are especially pertinent when the number of individuals involved is small or where there is only a single use of the product and practice, e.g., where the evidence is based on one teacher and one classroom. Thus it is desirable, when the number of persons is small, to have multiple replications of the program (e.g., different classrooms, different teachers, different schools, different years). Finally, if data are analyzed across sites, and/or various sub-group factors (sex, grade level, socioeconomic class, race, etc.), is there evidence that the product or practice is equally effective for all sub-groups for which claims are made?
- ° If it has been established that there have been gains, that they are large enough to be statistically and

educationally significant, and that they are generalizable beyond the originating site, the central question remains: Can we be reasonably confident that the gains can be directly attributed to the products or practices described in the submission rather than to effects associated with the testing process, student maturation, the regular educational process, or to other special factors which may be affecting the students?

The preceding questions are often asked by the JDRP as it assesses the evidence of effectiveness presented to substantiate the program claims.

The term "exemplary" is conferred only after a project has been approved by the JDRP. The exemplary projects are outlined in the National Diffusion Network Division's catalog entitled Educational Programs That Work.

An unusually high number, 21, of the projects developed with HCEEP funding have been approved for dissemination by the JDRP, on the basis of evidence of effective programming for children and information on the cost of replicating the project's services. The HCEEP has sponsored the highest number of JDRP approved projects for handicapped children of any program in Special Education Programs (formerly BEH), despite the greater difficulty of showing effectiveness at early ages, when standard achievement score data is not available, for instance. A number of the 21 JDRP approved projects have also competed for and been awarded grants from the National Diffusion Network (NDN) to replicate their models in the public schools. A sub-network of NDN, Special Education projects, has been formed to improve the coordination and visibility of projects serving handicapped children within the NDN. Educational Programs That Work - Special Education provides information on the evidence of effectiveness and replication costs of these projects.

B. Twenty-One HCEEP Projects Approved by The JDRP

The following section provides a brief description of each of the 21 HCEEP projects awarded exemplary status and approved for dissemination by the JDRP. Evidence of effectiveness is provided with information on the scope of each project's impact. The 21 projects listed alphabetically by State are:

1. The Rutland Center -- Developmental Therapy Model for Treating Emotionally Disturbed Children - Athens, Georgia
2. PEECH: Precise Early Education for Children with Handicaps - Champaign, Illinois
3. Peoria 0-3 Project -- Replication of an Interdisciplinary Approach to the Early Education of Handicapped Children Ages 0-3 Peoria, Illinois
4. Macomb 0-3 Regional Project: A Rural Child/Parent Service - Macomb, Illinois
5. Facilitative Environments Encouraging Development (FEED) - Bloomington, Indiana
6. Project ERIN: Early Recognition Intervention Network-Dedham, Massachusetts
7. Cognitively Oriented Preschool Curriculum - Ypsilanti, Michigan
8. UNISTAPS - St. Paul, Minnesota
9. Central Institute for the Deaf Early Education Project - St. Louis, Missouri
10. Putnam/Northern Westchester Board of Cooperative Educational Services (BOCES) - Yorktown, New York
11. A Comprehensive Program for Handicapped Preschool Children and Their Families in Rural and Non-Urban Areas - Fargo, North Dakota
12. The Teaching Research Infant and Child Center Classroom for Moderately and Severely Handicapped Children - Monmouth, Oregon
13. Good Samaritan Diagnostic/Prescriptive Classroom for Handicapped Preschool Children - Portland, Oregon
14. Developmental Education Birth Through Two (DEBT) - Lubbock, Texas
15. A Program for Early Education of Children with Handicaps - Wichita Falls, Texas
16. MAPPS: Multi-Agency Project for Preschoolers - Logan, Utah
17. Project SKI*HI - Ogden, Utah

18. Program for Children with Down's Syndrome - Seattle, Washington
19. Communication Programs - Seattle, Washington
20. Comprehensive Training Program for Infant and Young Cerebral Palsied Children (C.P. Project) - Milwaukee, Wisconsin
21. The Portage Project: A Home Approach to the Early Education of Handicapped Children - Portage, Wisconsin

The project descriptions are presented on the following pages. This material was compiled from Educational Programs That Work (1981), Special Education Programs That Work (Fall/Winter, 1980), and Handicapped Children's Early Education Program: Overview and Directory (1978-79, 1979-80, 1981-82); as well as from the surveys carried out under this contract.

PROJECT: THE RUTLAND CENTER -- DEVELOPMENTAL THERAPY MODEL FOR TREATING EMOTIONALLY DISTURBED CHILDREN

AGENCY: National Technical Assistance Office, University of Georgia; Athens, Ga.

TARGET AUDIENCE: Approved by JDRP for severely emotionally disturbed or autistic children from birth to age 8, their families, and teachers. It has been used in other settings with children to age 14, but no evidence of effectiveness has been submitted to or approved by the Panel.

DESCRIPTION: A community-based psychoeducational facility that offers a developmental curriculum to severely emotionally disturbed or autistic children from birth to 14 years, their parents, and teachers.

The Rutland Center Developmental Therapy Model is the result of eight years of intensive effort by the Rutland Center staff. Developmental Therapy is a therapeutic curriculum for social and emotional growth. It is used in a classroom setting with five to eight individuals in a group and is based on the assumption that young disturbed or autistic children go through the same stages of development that normal youngsters do, but at a different pace. The curriculum guides treatment and measures progress by focusing on the normal developmental milestones that all children must master. By doing so, Developmental Therapy has established itself as a "growth model" rather than a "deficit model." The model is composed of four curriculum areas (behavior, communication, socialization, and pre-academics) arranged in five developmental stages, each requiring different emphases and techniques. Special services to parents are an integral part of the approach. Developmental Therapy also emphasizes concurrent placement with nonhandicapped children. This "school follow through" aspect of the model requires that regular school experiences mesh smoothly with intensive Developmental Therapy Experiences.

In response to PL 94-142, two resources are available which emphasize how to plan, implement, and evaluate an Individualized Education Program (IEP) using the developmental approach. The National Technical Assistance Office offers four types of technical assistance to the Rutland Center Developmental Therapy model in the treatment of severely emotionally disturbed preschool children. This assistance, which includes information dissemination, program planning and design, training, and program evaluation, is provided through site visits and exchange of audio-visual materials. The Developmental Therapy Institute uses the Rutland Center Developmental Therapy model to provide on-site, year-long training assistance to individuals, schools, and agencies concerned with personnel training for school-age severely emotionally disturbed and autistic children. The institute staff provides assessment of training needs, designs an inservice instructional sequence suited to agency and trainee needs, and implements the training program at the agency site with periodic visits.

EVIDENCE OF EFFECTIVENESS: The model assumes five distinct stages. Progress through stages is measured by the Developmental Therapy Objectives, 171 statements outlining a sequence of developmental milestones. Mastering these objectives makes normal growth possible. Each child's treatment focuses on appropriate objectives, and children are grouped by similar major objectives. Data collected clearly show sequential mastery and steady progress by children.

Ninety percent of the children who have left the program have not required further mental health services, though some have needed such services as speech therapy. This is an unusually high non-recidivism rate. Prior to the development of this project mental health services for young children were very scarce in Georgia, but the State Departments of Education and Mental Health now support them throughout the state.

SCOPE OF IMPACT: The Rutland Center Psychoeducational Center model for emotionally disturbed children has been widely replicated in other states as well. In 1979-80, a total of \$2,336,788 was invested by other agencies to replicate the project. This is a return of 21 program dollars for each dollar OSE invested in the outreach project that year (\$109,648).

The project has developed curriculum, training and evaluation materials, as well as music therapy materials. The model has been successfully used in public school and day care settings.

PROJECT: PEECH: Precise Early Education for Children with Handicaps
AGENCY: Institute for Child Behavior and Development
 University of Illinois, Champaign, Illinois

TARGET AUDIENCE: Approved by JDRP for handicapped children, ages 3-6, and their families.

DESCRIPTION: An individualized educational program designed to enhance the development of preschool handicapped children while involving family members in the educational process.

The PEECH Project serves handicapped children ages 3-6 functioning in a wide intellectual range with a multiplicity of cognitive, language, speech, social, emotional, and/or motor problems. The majority of children are identified through community-based round-ups designed to screen all young children. Children identified as high-risk receive an in-depth psychoeducational assessment to determine eligibility. Also integrated into the program are children who have no special educational needs. These children serve as models for language, cognitive, motor, and social skills.

Children are enrolled in a classroom program for a half-day five days a week. Educational needs are determined by systematic observations of each child. This procedure provides information on each child's level of functioning in the fine motor, gross motor, language, math, special, and self-help areas. Program features include a low student/teacher ratio, a positive approach to behavior management, extensive training and involvement of paraprofessionals as teachers, a carefully structured learning environment, and precise planning and evaluation of daily individualized teaching sessions.

Families are involved through an extensive individualized program. Parents have input into the educational program. Parent conferences, home visits, group meetings, classroom observation, and other activities are employed to help family members. A resource room serves as a lending library for parents interested in books and tapes for themselves, as well as in books, records, and toys for their children.

One staff member should be assigned the responsibility (and time) for coordinating screening, child assessment, classroom programming, staff training, and evaluation, and for acting as liaison with the PEECH demonstration site. Optimal staffing consists of one head teacher and one paraprofessional, with ancillary service from a speech and language therapist, psychologist, social worker, and occupational therapist, but a basic program can be implemented by a trained teacher and paraprofessional only.

EVIDENCE OF EFFECTIVENESS: The mean I.Q. of all children (handicapped and model) enrolled in one PEECH classroom was 87, with a range from 35-125. Posttests revealed a gain of 9.1 points (for a post-test range of 47-136). Of these children, 86 percent entered a regular educational program, with only 14 percent being placed in a special program.

SCOPE OF IMPACT: Available from the project are manuals on classroom planning and programming, manuals on family involvement and handouts describing components of the early childhood special education program.

Forty-two sites are known to be using components of the demonstration model.

PROJECT: PEORIA 0-3 PROJECT -- Replication of an Interdisciplinary Approach to the Early Education of Handicapped Children Ages 0-3

AGENCY: United Cerebral Palsy and Peoria Association for Retarded Citizens Peoria, Illinois.

TARGET AUDIENCE: Approved by JDRP for handicapped infants, ages 0-3, and persons dealing with this population (occupational/physical/speech therapists, parents, home trainers, teachers, social workers, psychologists/administrators, and volunteers).

DESCRIPTION: A medical/educational model based on a developmental-task analysis approach to individualized prescriptive teaching, delivered in the home by parents with assistance from professionals.

The ongoing direct service program serves children ages 0-3 at risk, mentally retarded and/or orthopedically handicapped. The service program includes a diagnostic and evaluation service, Individual Educational Program (IEP) planning, direct service home-based programming (including occupational, physical, and speech therapy when appropriate), and parent support systems.

Based on results of the Functional Profile, a project-designed tool assessing a child's functioning levels in six basic areas, the child's developmental program is designed by the parent and an interdisciplinary team composed of a social worker, a child development specialist, and occupational, physical, and speech therapists. This plan is reviewed weekly. Each discipline contributes activities, called targets, to the home program plan. The child development specialist takes weekly target lessons into the home, presents the lesson to the child, models it for the parent, records the child's baseline performance, and explains procedures for recording the child's response on an activity chart. Continuous monitoring of the activity chart, coupled with information from parents, permits appropriate changes in instructional strategies. Since many children in the program are multiply and/or physically involved, ongoing medical supervision is provided, and outpatient physical and/or occupational therapy services are available. Parent involvement is viewed as crucial to the success of the educational program, and parent support systems are an integral part of the program. Individual parent counseling sessions are available, and ongoing parent discussion groups are maintained.

Modeled on the direct service program, the training program assists agencies serving children ages 0-3 to develop and/or upgrade services to handicapped infants and toddlers. Individually designed to meet the needs of the local agency and/or community, training involves an intensive three- to five-day initial workshop and four to six follow-up visits. Within one year, trainees achieve competencies necessary to implement the program model in their local agency or program.

EVIDENCE OF EFFECTIVENESS: Over a one-year period 99 children from a variety of socioeconomic backgrounds were measured with the Functional Profile (a project-designed instrument; reliability and concurrent validities established in an independent study; and the Denver Developmental Screening Test. Study design compared actual growth with estimated growth. Significant gains were found in personal social, cognitive-linguistic-verbal, eating, toileting, and dressing. Gains for fine and gross motor were not as great; one half of the test population was orthopedically handicapped.

SCOPE OF IMPACT: These materials are available: slide-tape presentations (on both normal and abnormal motor development); a videotape on alternate communication; a program manual; handouts on parent education, motor and speech/language development; the Functional Profile (child progress assessment instrument birth to 6); and others.

One hundred twenty-seven sites are known to be using components of the demonstration model.

PROJECT: MACOMB 0-3 REGIONAL PROJECT: A Rural Child/Parent Service

AGENCY: Western Illinois University; Macomb, Illinois

TARGET AUDIENCE: Approved by JDRP for children from birth to age 3 and their parents.

DESCRIPTION: A project that provides home-based remedial and educational services to handicapped children and their parents in rural areas.

The program has two main goals: to provide an effective educational and remedial program for the optimal development of handicapped infants and children in rural areas, and to help parents who live in rural areas acquire skills and knowledge that will make them more effective in dealing with their handicapped child. The assumption on which development of the project was based is that parental involvement and cooperation, and enthusiasm and coordination among the persons who work with the child and family are all essential.

The project uses a number of materials and services to attain its goals, including referrals, screening, diagnosis, and assessment; home visits; sharing centers for parents and children, and a simple-to-use core curriculum that provides appropriate developmental goals in cognitive, language, self-help, gross motor, social, and sensory areas. Staff include full-time Child Development Specialists (CDSs), who act as case managers and perform other functions. A CDS works closely with children and parents and is trained to recognize the need for specialists, such as speech therapists and physicians, and to obtain their services. Project staff also work to make the best use of the limited medical and support services available in rural areas. By participating in interagency community councils, providing service to community groups, and working closely with public school personnel, they help to foster cooperation among agencies.

Parents are involved in a variety of ways. During weekly project visits to the homes of project children, the CDS and the parent work as a team with the child. Parents also participate in the planning and conduct of bi-weekly meetings at sharing centers, which are located in community building or homes and which function much like cooperative nursery schools, providing a transition between home and center-based activities.

EVIDENCE OF EFFECTIVENESS: All participants are pre- and posttested using the Alpern-Boll Developmental Profile and the Bzoch-League Test of Receptive and Expressive Emergent Language. Test data indicate that the program has significant development impact. Complete entrance-exit data for 34 children served by the project during an 18-month period are available.

SCOPE OF IMPACT: Parents are involved in all activities of this home-based rural program. The Sharing Center, a unique component of the program, is a popular and effective means of bringing parents and children together to engage in learning activities. The project has developed four books and 31 "Baby Buggy" papers for sale, and a series of video-tapes and slide-tapes are available for rent.

Fifteen sites are known to be using components of the demonstration model.

PROJECT: FACILITATIVE ENVIRONMENTS ENCOURAGING DEVELOPMENT (FEED)

AGENCY: Institute for Child Study; Indiana University

TARGET AUDIENCE: Approved by JDRP for children in middle-grades (7-8).

DESCRIPTION: A middle-grade (7-8) curriculum experience designed to increase knowledge of good child care and health care practices.

FEED focuses on assisting young people to learn about child growth and development of infants and preschoolers before they become parents. The program includes both in-school and out-of-school practicum settings where young people encounter direct experiences with normal and handicapped infants and preschoolers, teachers, and assorted personnel. The program was designed to teach young people that infants are much more competent at birth than most people believe and that the quality of the care provided during the first days and months of the infant's life do much to either facilitate or hamper the child's development.

FEED is designed to be a primary prevention program aimed at teaching young people, before they have children, development and future school success. Due to the large segment of the adolescent population who have become child bearing before 16 years of age (500,000 per year), FEED has been designed for the seventh and eighth grader, to reach the audience of future parents before they become parents.

The major short-term goals are: (1) to increase FEED students' knowledge of child growth and development; (2) to positively influence FEED students' attitudes toward infants as active-learning organisms; and (3) to encourage FEED students to perceive children who are handicapped essentially as children in need of teaching and capable of learning.

EVIDENCE OF EFFECTIVENESS: To measure the short-term goals five instruments were developed and were criterion-referenced to objectives. Each instrument was field tested and revised by field personnel, students and project personnel. In addition, two commercially prepared instruments were selected. These were the Mooney Problem Checklist (Mooney & Gordon, 1950) and Your Thoughts and Feelings (Norwick and Strickland, 1973).

SCOPE OF IMPACT: The project has developed an Implementation and Curriculum Guide which is commercially published. The project has operated in urban, rural and suburban communities in these states: Illinois, Kentucky, Maine, New Hampshire, New York, Indiana, Texas, California, Hawaii and Oregon, as well as in Israel and the Phillipines.

PROJECT: PROJECT ERIN: Early Recognition Intervention Network

AGENCY: Project Erin; Dedham, Massachusetts

TARGET AUDIENCE: Approved by JDRP for children 2-7 with mild to severe handicaps in mainstream or special settings, competency-based training programs for regular and special teachers, program coordinators, and parents.

DESCRIPTION: Coordinated training programs and service delivery systems aimed at harnessing the learning environment/materials/adult intervention to teach young children with special needs.

The ERIN System is being utilized for two- to seven-year-olds and their parents in specialized preschool classroom/home programs serving children with moderate to severe special needs and in regular early childhood (nursery, Head Start, day care) and primary (K-1) programs serving mainstreamed mild to moderate special needs children.

The ERIN Training Program for Adults (special and regular teachers, coordinators, and parents) provides the equivalent of three to six college credits through a week-long Institute, augmented by on-site consultation with ERIN staff. Each adult implements a year-long program in his/her learning environment for two or more children with special needs, following weekly units of observation and action. There are two 16-unit sets for the first ERIN year, one for mainstream and one for specialized sites. More detailed (spiral) units are available for subsequent years. Competency certificates are given for each module (set of units) completed. The program works best when a local coordinator continues training, using ERIN materials for each module, and provides feedback to local teachers on a regular basis. Training and support materials are modeled at the Institute.

The child's Individual Education Program is implemented in large and small groups and individually. The teaching adult organizes his/her own learning environment to facilitate participation (social-emotional-affective), body awareness and control, visual-perceptual-motor, and language skills -- all organized into self-help, developmental concept, and academic readiness content areas, depending on the age of the child. Initially, the curriculum approach focuses on general classroom/home modifications of the physical space and daily time units, learning materials and their organization into learning sequences, the grouping of children, and teacher cueing/monitoring. This is followed by the teaching of specific skills to each child, with greater intensity in specialized programs.

EVIDENCE OF EFFECTIVENESS: Specialized programs: preschool children (moderate to severe special needs) gained five extra months' development during a six-month period (McCarthy Scales of Children's Abilities). Mainstream programs: K-1 children (mild to moderate special needs) showed greater gains than control children on McCarthy, Metropolitan Readiness Test, and Preschool Screening System.

SCOPE OF IMPACT: Project-developed materials include: Preschool Screening Systems, a child and parent questionnaire; Developmental Inventory of Learned Skills, criterion-referenced lists for children aged birth to 8 years; Implementing the ERIN Program, a teacher/coordinator kit (modules on environment, evaluation/screening, planning and teaching, with supporting tapes and materials); Resource Books on teaching language, visual, perceptual, motor skill awareness and control, and participation; and First Steps Guidebook 1, for inducing participation skills. A complete list is available from ERIN.

Forty sites are known to be using components of the demonstration model.

PROJECT: COGNITIVELY ORIENTED PRESCHOOL CURRICULUM
AGENCY: High/Scope Educational Research Foundation;
 Ypsilanti, Michigan

TARGET AUDIENCE: Approved by JDRP for preschool children of all abilities.

DESCRIPTION: A preschool program with the designated purpose of mainstreaming mildly and moderately handicapped children with nonhandicapped children.

The Cognitively Oriented Preschool Curriculum is an open framework model derived from Piagetian theory. The curriculum originated from one of the first early childhood intervention programs of the 1960s, the Ypsilanti-Perry Preschool Project, and was further developed with funding as a demonstration project in the First Chance Network for preschool handicapped. Through designated key experiences for children, teaching and parenting strategies, and child-observation materials, the curriculum provides a decision-making framework. Within this framework, teachers design a classroom program that reflects the expressed needs and interests of the children being served. This approach emphasizes the identification of the child's status on a developmental continuum by examining his/her strengths and accomplishments. The project views discrepancies in behavior between handicapped and nonhandicapped age peers as developmental delays, not as deficiencies. Basing their tasks on this orientation, teachers initiate developmentally appropriate experiences in the classroom that reflect the basic long-range goals of the program. These goals are: to develop children's ability to use a variety of skills in the arts and physical movement; to develop their knowledge of objects as a base of educational concepts; to develop their ability to speak, dramatize, and graphically represent their experiences and communicate these experiences to other children and adults; to develop their ability to work with others, make decisions about what to do and how to do it, and plan their use of time and energy; and to develop their ability to apply their newly acquired reasoning capacity in a wide range of naturally occurring situations and with a variety of materials.

The plan-do-review sequence encourages children to achieve these goals by involving them in decision-making and problem-solving situations throughout the day. The teacher's role is to support the children's decisions and encourage them to extend learning beyond the original plan. Similarly, teachers rely on a basic room arrangement and daily routine designed to stimulate and support active learning.

EVIDENCE OF EFFECTIVENESS: Program children demonstrated significant gains on the McCarthy Scales in the areas of verbal, qualitative, general cognitive, memory, and perceptual development, as well as in problem-solving skills and social skills (as measured by classroom observation). Pre and posttesting with the McCarthy Scales indicated that the children, as a group, advanced 2.02 months in mental age for each month in the program.

SCOPE OF IMPACT: The High/Scope curriculum is documented in Young Children in Action: A Manual for Preschool Educators. Many audiovisual materials are available to support training in this curriculum model.

Sixty-one sites are known to be using components of the demonstration model.

PROJECT: UNISTAPS
AGENCY: University of Minnesota, State Department, Minnesota Public Schools;
 St. Paul, Minnesota

TARGET AUDIENCE: Approved for severely handicapped children age 0-5.

DESCRIPTION: A family oriented noncategorical program for severely handicapped children, 0-5 years of age, deaf and hard of hearing component.

UNISTAPS has evolved from a program which served only hearing impaired (deaf and hard of hearing) children in 1969 to one that in 1973 added visually impaired children, and in 1974 initiated service on a multicategorical handicap basis. UNISTAPS is an acronym indicating the involvement of the University of Minnesota, State Department of Education, and the Minneapolis Public Schools. The laboratory program serves children in the age range of 0 to 5 years and their parents. There were 52 children in the laboratory program in 1973-1974, 38 of which were hearing impaired and 14 of which are visually impaired. The objectives of the UNISTAPS program are comprehensive evaluation of each child for future programming; development of the child's reliance upon spoken language as normal means of communication; strengthened parent-child relationships; community awareness of University-State Department-Public School resources to challenge innate abilities of the hearing impaired; and incorporation of these principles and practices in University teacher-training programs.

Program standards include: provision of individual binaural hearing aids; regular nursery school placement (tuition of private nursery paid by local school districts and the state); individual instruction as a supplement to group educational placement (auditory and linguistic); continuing parent guidance, counseling and education, and inservice training and demonstration teaching, regular nursery school staff.

A pre-enrollment assessment is made by means of observing the child in his home and nursery, assessing family needs during a home visit, assessing nursery/agency needs through observation and discussion, and obtaining relevant medical information. Upon acceptance into the program, children are enrolled in either the Infant or the Pre-Kindergarten Program.

EVIDENCE OF EFFECTIVENESS: Child progress was demonstrated (1973-1974) in the Family-Oriented Infant/Preschool Program for Hearing Impaired Children in terms of the achievement of specific pupil development objectives. It was expected that during the school year, 80 percent of the children enrolled in the Parent Program, Infant/Preschool would gain at least 7 months developmentally on the Preschool Attainment Record (PAR) in the Ambulation, Manipulation, Ideation and Creativity sections.

SCOPE OF IMPACT: The UNISTAPS project developed a statewide plan for all young handicapped children based on its work with hearing impaired infants and preschoolers. The project developed a guide for pleasurable home activities to use with hearing impaired children from birth to age 3 which incorporates knowledge from the fields of child development and special education.

PROJECT: CENTRAL INSTITUTE FOR THE DEAF EARLY EDUCATION PROJECT

AGENCY: Central Institute For The Deaf; St. Louis, Missouri

TARGET AUDIENCE: Approved by JDRP for children under four years of age who have educationally significant hearing impairments and their families.

DESCRIPTION: A program designed to help parents assume their natural role as the child's primary language teacher through parent-child interaction.

The core of the program consists of weekly individual sessions in a Home Demonstration Center. The sessions are parent-oriented so that families may realize their primary responsibility in the language development of their children. Sessions are individualized so that the program developed is the most appropriate for each family and child. They are held in a home-like setting and focus on typical daily household activities. This setting and focus aid parents in learning strategies and techniques suitable for use in their own homes. Emphasis is placed on helping parents provide a learning environment that takes into account the child's impaired auditory ability.

Regular audiometric evaluations are conducted by staff audiologists. Since all hearing-impaired children have some residual hearing, early amplification combined with auditory training can significantly affect the child's acquisition of speech and language. Therefore, amplification is provided in order to maximize the child's use of his/her residual hearing. The Early Education Project or Clinic may lend the child an aid and follow up with observation and retesting before recommending a specific aid for purchase.

Parent group meetings are an integral part of the program. They include group discussion meetings, which allow parents to explore their feelings and share their problems and solutions with other parents, as well as more didactic meetings, which respond to the parents' need for current, accurate, scientific information.

Children over two are enrolled in short nursery class sessions taught by a teacher of the deaf trained in early childhood education. Parent participation is an important part of these classes. The development of social and behavioral skills in preparation for preschool is emphasized. Activities are designed to provide children with opportunities for social-communicative interaction paving the way for verbal interaction.

EVIDENCE OF EFFECTIVENESS: The mean ratings of language ability of children from the Early Education Project differ reliably from those of children not in the program, and the scores increase consistently and reliably throughout all age ranges from two to six years. The steady increase of communication skill was measured using the Scales of Early Communication Skills.

SCOPE OF IMPACT: The project developed a video-tape collection illustrating the Auditory Global approach to developing oral language which had been used as a self-teaching tool for parents and teachers and in coursework. The project has been replicated in numerous locations, including the Toledo Public Schools.

PROJECT: A REGIONAL DEMONSTRATION PROGRAM FOR PRESCHOOL HANDICAPPED CHILDREN
AGENCY: Putnam/Northern Westchester Board of Cooperative Educational Services (BOCES), Special Education Department

TARGET AUDIENCE: Approved by JDRP for children three to five years of age who exhibit one or more of the handicapping conditions defined for children in New York State.

DESCRIPTION: A regional demonstration program for children age birth to five years designed to provide a comprehensive program of educational services.

The BOCES Preschool Handicapped Program (PSHP) is a regional program serving eighteen school districts in Northern Westchester and Putnam Counties of New York. It provides early intervention services for children three to five years of age who exhibit various handicaps: Severely Speech/Language Impaired, Emotionally Disturbed, Physically Handicapped, Specific Learning Disability, Hard of Hearing/Deaf, Legally Blind/Partially Sighted, Educable Mentally Retarded, Trainable Mentally Retarded, and Autistic.

Student placement in PSHP is determined through a multi-step process which begins when a child is referred by the parent or professional for screening. During the screening procedure, an assessment is made of the child's level of functioning through a combination of parent interviews, behavioral observations and administration of formal and informal tests, including the Denver Developmental Screening Test. If the child is functioning significantly below the age-appropriate level in language, personal-social and/or motor skill areas, and is diagnosed according to state handicap classifications, he/she is considered eligible for the program services. Final placement in PSHP classrooms is made on the basis of age and maturity of the child, the family/child interaction patterns, and the readiness of the child for classroom activities.

EVIDENCE OF EFFECTIVENESS: As compared to the norm group, students participating in the Preschool Handicapped Program achieved significant gains from pretest to posttest in a) verbal, b) perceptual-performance, c) motor, and d) general cognitive skill areas.

SCOPE OF IMPACT: The following materials are available from the project: The Curriculum Model for a Regional Demonstration Program for Preschool Handicapped Children, Preschool Project Manual, The Parent Volunteer System, A Manual and Activity Catalog for Teachers, The Transdisciplinary Training, Assessment and Consultation Model, A Guide for Creating Community Awareness and Developing Interagency Cooperation. The project also offers training in these areas. On-site training workshops are available for projects interested in replicating any of the program's components.

Ten sites are known to be using components of the demonstration model.

PROJECT: A COMPREHENSIVE PROGRAM FOR HANDICAPPED PRESCHOOL CHILDREN AND THEIR FAMILIES IN RURAL AND NON-URBAN AREAS

AGENCY: Southeast Mental Health and Retardation Center
Fargo, North Dakota

TARGET AUDIENCE: Approved by JDRP for multicategorically handicapped preschool children, birth to age 6, and their families.

DESCRIPTION: A comprehensive preschool program providing for maximal growth and development of handicapped preschool children and their families in rural areas.

The program consists of four related parts on a continuum from prevention to intervention. On the prevention end of the continuum is The Magic Kingdom: A Preschool Screening Program, which identifies children age 3½-6 who require more intensive follow-up evaluation and also maintains cost effectiveness through extensive parent involvement. Next on the continuum is Parents and Children Together (PACT), a parent education program that provides prevention and early intervention activities. In PACT, a parent facilitator is recruited and parent groups are formed. These groups meet in the members' homes to discuss prepared written packets concerning behavior management and social-emotional, speech and language, and motor and cognitive development. Stimulating to Potential (STP) begins the intervention end of the continuum, providing in-home education services to handicapped preschool children. Children enrolled in STP are seen weekly by a home teacher, who develops individual education plans (IEP's) for the children and trains the parents to implement these plans. Guidance and instruction from the home teacher are provided to parents while they implement the IEP's with their own children. The Therapeutic Evaluation and Treatment Center (TETC) provides the most intensive intervention of the four parts. In this classroom program, individual education plans are developed for each child and implemented by a multidisciplinary staff, with parents observing and participating. In both TETC and STP, observational data collection procedures are used to monitor implementation and make program updates and revisions as needed.

EVIDENCE OF EFFECTIVENESS: Effectiveness was demonstrated through correlation of screening program results with results of other tests; pre/posttesting of cognitive gains by parents, parent effectiveness, attendance, and projects; pre/posttesting of children in developmental areas; use of the Alpern-Boll Developmental Profile, which showed average gains of .98 to 1.41 months per month of enrollment; and TETC Skills Assessment, an instrument developed by program staff.

SCOPE OF IMPACT: This project has developed a screening procedure called The Magic Kingdom for children between 3½ and 6 years of age to identify development delays in the motor, visual, auditory, language, conceptual, social-emotional and self-care areas. Parents and other community volunteers are trained to serve as screeners as the children move from one "castle" station to another, using a game format. Scores are matched with average scores of a sample of 2,000 children. The project materials have been widely used in North Dakota and elsewhere.

PROJECT: THE TEACHING RESEARCH INFANT AND CHILD CENTER CLASSROOM FOR MODERATELY AND SEVERELY HANDICAPPED CHILDREN

AGENCY: Oregon College of Education; Monmouth, Oregon

TARGET AUDIENCE: Approved by JDRP for moderately to severely handicapped children, ages 1-18, including mentally retarded, cerebral palsied, autistic, emotionally disturbed, deaf/blind, and hearing impaired.

DESCRIPTION: An individualized skills instruction program for moderately to severely handicapped children.

Children are pretested on skills selected from the Teaching Research Curriculum for Moderately and Severely Handicapped. Pretest results are used to determine which skills will be taught. The deficit skills are prioritized by the parent and educational staff. After priorities are established, the child is placed in one or more of the four curricular areas -- self-help, motor, language, and cognitive.

Individual instructional programs are prepared for each child. A program prescribes the skill to be taught, the way in which the materials are to be presented, and the feedback to be given to the child. Trained volunteers play an important role in this model. They are taught how to deliver cues and feedback and how to record the child's appropriate and inappropriate responses to instruction. Maintenance of volunteer skills is objectively monitored by the teacher. Volunteers implement the instructional programs with each child and record child performance data in a specified manner. If the volunteer indicates through recorded data or verbally during classroom instruction that the child is having difficulty learning a particular program, the teacher provides instruction for the child. The teacher uses the daily data to make teaching decisions concerning individual programs for the following day and to ascertain whether sequencing, cue presentation, or feedback need to be altered.

When group instruction occurs, the teacher interacts with each child according to his/her individual instructional program. In this model, group instruction is provided only by the teacher or aide. Some instructional programs are selected by parent and teacher to be taught in the home, and these are coordinated with programs in the school. Teaching periods in the home vary from 10 to 30 minutes. Approximately 85 percent of the parents of project children participate in home instruction. All parents participate in the program planning conferences for their child.

EVIDENCE OF EFFECTIVENESS: Using a multiple baseline approach, it was demonstrated that within the Teaching Research Infant and Child Center a mean of 7.9 skills per month was acquired by a child without instruction, while 64.4 skills per month were acquired with instruction. Replication-site children acquired a mean of 9.1 skills without instruction and 90.1 skills with instruction.

SCOPE OF IMPACT: The project offers demonstration center training. The project staff identifies inservice objectives and provides evaluation at the time of training and follow-up.

One hundred fifty sites are known to be using components of the demonstration model.

PROJECT: GOOD SAMARITAN DIGANOSTIC/PRESCRIPTIVE CLASSROOM FOR HANDICAPPED PRESCHOOL CHILDREN

AGENCY: Good Samaritan Hospital and Medical Center

TARGET AUDIENCE: Approved by JDRP for handicapped preschool children.

DESCRIPTION: A multidisciplinary team approach to the education of handicapped preschool children.

Two classrooms for moderately to profoundly handicapped children have been established in the Good Samaritan program, one for toddlers (18 months to 3 years) and one for 3- to 5-year-olds. Before enrollment in the program, children are given a thorough diagnosis and evaluation; then placed in a specific teaching sequence by means of the program's prescriptive placement test. The curriculum, which is organized by developmental sequences, covers self-help, motor skills, expressive and receptive language, cognitive skills, and social skills. In addition, physical therapy, occupational therapy, speech therapy, and monitoring of each child's medical treatment are incorporated into the classroom activities. Each classroom is staffed by a teacher and an assistant teacher. Parents, volunteers, and college practicum students help with individual instruction, and parents are encouraged to continue instruction at home as well. Psychological services for the children and their families, as well as medical consultation on site for the children and training in skill development and behavior management for parents are all provided by the program.

SCOPE OF IMPACT: The project trains teachers and allied professionals in its classroom diganostic-prescriptive model and trains related professionals (psychologists, occupational and physical therapists, social workers) in components of diagnostic, classroom and family treatment modules. It also trains parent trainers with an emphasis on working with children aged birth to 3 years.

Ten sites are known to be using components of the demonstration model.

PROJECT: DEVELOPMENTAL EDUCATION BIRTH THROUGH TWO (DEBT)

AGENCY: Lubbock Independent School District

TARGET AUDIENCE: Approved by JDRP for children birth through two years (children whose third birthday occurs after September 1 are eligible for the duration of the school year).

DESCRIPTION: A home-based program for parents of very young handicapped children (birth through two).

The objectives of the DEBT Project are: 1) to improve developmental progress of infants served, 2) to improve parental interest and involvement in the parenting role, and 3) to integrate the project into the community human service delivery network.

Eligibility for the DEBT Project is determined through an appraisal/placement process involving the following steps: a) referral, b) age determination, c) parental consent, d) home observation, e) in-depth assessment, f) service and follow-up.

The primary vehicle for delivery of services to children is the Individualized Education Program (IEP), which specifies long term goals, weekly objectives, and instructional activities and materials. The curricular basis is the Koontz Child Developmental Program, which provides training activities for the first 48 months of life in the areas of gross motor, fine motor, social, receptive language, and expressive language.

The DEBT teachers visit each home weekly and work directly with the parent and child in implementing the IEP. The parent receives assistance in improving parenting skills and in providing prescribed educational activities for the handicapped child. Parental growth is fostered through parent meetings, program presentations, coffees, and materials development workshops.

Other intervention includes the DEBT water play program which provides educational and recreational experiences for both the parents and children. This program component housed at the YMCA utilizes the gym and pool. A developmental curriculum for water and gym play also has been developed, and other direct service to the children has included physical therapy, occupational therapy, and speech therapy as needed.

EVIDENCE OF EFFECTIVENESS: Two sources of data demonstrate developmental progress: 1) scores from the Koontz Child Developmental Program and 2) follow-up placement after graduation from the DEBT Project,

SCOPE OF IMPACT: Optional components of the DEBT model include a Water Play Program, Stay and Stitch Activities, a Saturday Morning Workshop for Men and a Parent Study Group. DEBT's research document detailing child progress data and parent involvement is available. Other products include: DEBT Diaper Dudes, DEBT Developmental Scale from Birth to Six Years, DEBT Teaching Activities Packet Birth to 36 Months, Comprehensive Training Notebook, DEBT GOSPEL Guidebook, DEBT Model Project (brochure), DEBT Outreach Project (brochure), Love Your Baby, and a bibliography of literature on child growth and development, intervention techniques and parental communications.

Forty sites are known to be using components of the demonstration model, which involves community volunteers.

PROJECT: A PROGRAM FOR EARLY EDUCATION OF CHILDREN WITH HANDICAPS

AGENCY: Region IX Education Service Center; Wichita, Texas

TARGET AUDIENCE: Approved by JDRP for handicapped children, five months to six years of age.

DESCRIPTION: A home intervention program involving parents in the teaching of their handicapped children.

The Region IX Education Service Center serves 40 rural, sparsely populated public school districts in 12 north central Texas counties. This program, a home intervention model, is based on the premise that parents can be actively involved on a daily basis in teaching their handicapped children, and that through the teaching experience, by observing and recording changes in behavior, they can discover the areas in which their children need help. The program's ultimate goal is for the parent to assume chief teaching responsibilities until the child can attend school.

Home teachers make weekly home visits of approximately one and one-half hours to show parents how to use behavior modification techniques -- when to reward, what to reward, and how to chart behavior. By observing this modeling process, parents become equipped to continue that work for a week, progressively achieving the short- and long-term goals for their children.

Training emphasizes administrative guidance and teacher training in the areas of assessment, behavior management, precision teaching, individualized educational programs, and parent training.

EVIDENCE OF EFFECTIVENESS: The average effect of pre- and posttesting with the Alpern Boll Developmental Profile (which measures self-help, socialization, physical, communication, and academic skills), Stanford-Binet, and the Cattell Infant Intelligence Test was significant.

SCOPE OF IMPACT: Dissemination products include Teacher's Handbook for developing home intervention programs and Parent's Handbook, which describes handicapping conditions and educational activities (and is also available in a Spanish edition).

Forty-eight sites are known to be using components of the demonstration model, which is especially suited to rural areas.

PROJECT: MAPPS: Multi-Agency Project for Pre-Schoolers
AGENCY: University Affiliated Exceptional Child Center
 Utah State University, Logan, Utah

TARGET AUDIENCE: Approved by JDRP for handicapped children, birth to age 5.

DESCRIPTION: An intervention program for handicapped children and their parents in remote areas.

The Multi-Agency Project for Pre-Schoolers is a home- and community-based intervention program for handicapped children in rural and remote areas, where professionals trained to work with handicapped children are often lacking. The program makes it possible for parents to act as intervention agents for their own handicapped children from birth to age 3 by providing parents with a detailed and specific curriculum, training them in its use, and providing weekly monitoring. For handicapped children ages 3-5, the program makes the use of existing preschool and community day care services practical by providing curriculum materials and training for parents and teachers.

The heart of the program is the Curriculum and Monitoring System (CAMS), which covers five curriculum areas: receptive language, expressive language, motor development, self-help development, and social-emotional development. The system includes five sequenced curriculum programs with detailed teaching instructions appropriate for use by persons of various backgrounds, a manual providing an overview of the CAMS model and explaining the procedures for use of the curriculum programs, tests to determine where each child should be placed in each program, and an introductory slide-tape presentation. Behavioral principles, particularly those related to programmed instruction, were the basis for the design and development of these materials.

EVIDENCE OF EFFECTIVENESS: Standardized and criterion-referenced pre- and posttests, including the Bayley Scales of Infant Development, the Peabody Picture Vocabulary Test, the Assessment of Children's Language Comprehension, and the Visual Motor Integration Scale, as well as criterion measures developed by the project, showed significant improvement over a nine-month period.

SCOPE OF IMPACT: The project staff provides training and administers standardized and criterion-referenced pre and posttests, including the Bayley Scales of Infant Development, the Peabody Picture Vocabulary Test, the Assessment of Children's Language Comprehension, and the Visual Motor Integration Scales. Criterion measures developed by the project are also used. Results from these assessments showed significant child gains over a 9-month period. The project has developed curriculum materials and criterion tests in five developmental areas; these are available for dissemination through Walker Publishing Company, New York.

Twenty-five sites are known to be using components of the demonstration model.

PROJECT: PROJECT SKI*HI
AGENCY: Department of Communicative Disorders
 Utah State University, Logan, Utah

TARGET AUDIENCE: Approved by JDRP for hearing-impaired infants and young children, birth to age 6, and their families.

DESCRIPTION: A statewide program providing identification and language facilitation for hearing-handicapped children, birth to age 6, through home management.

SKI*HI is a comprehensive program that provides screening, audiological, diagnostic, and assessment services and a complete home intervention curriculum for hearing-impaired children (birth to age 6) and their families.

The program is designed to provide services to a state-wide population or to a large population area. All hospitals are screened for babies with hearing loss. A diagnostic, assessment, and entry process ensures efficient, expeditious entry of children.

A complete home intervention curriculum is provided. It includes a home hearing aid program, a home communication program, a home auditory program, a home total communication program, and a home language program. Psychological, emotional, and child-development support are provided for parents in the home. Weekly, monthly, and comprehensive quarterly assessment of child and family is performed. Part-time parent advisers living in the area visit homes weekly to deliver the curriculum. A format for home visits is provided.

A support system of ongoing audiological services, a hearing evaluation and loaner system, video units and tapes for total communication, hearing aid molds, psychological services, parent group services, and a comprehensive evaluation system are provided.

EVIDENCE OF EFFECTIVENESS: The Discrepancy Evaluation Model is used. REEL, the SKI*HI Receptive Language Test, the SKI*HI Language Development Scale, and observational checklists are used. Pre/post measures showed a gain of 16 months in language after 11 months of treatment; significant differences in treatment and comparison groups were seen. Early-treatment group showed higher gains than late-treatment group.

SCOPE OF IMPACT: Currently 45 of the 50 replications stimulated by the project since 1975 are in operation, and are serving 1,015 children from birth to age 5. (The other five projects do not have hearing impaired young children in their area currently.)

PROJECT: PROGRAM FOR CHILDREN WITH DOWN'S SYNDROME
AGENCY: Model Preschool Center for Handicapped Children
 University of Washington, Seattle, Washington

TARGET AUDIENCE: Approved by JDRP for Down's syndrome children, birth to age 6.

DESCRIPTION: A program designed to accelerate and maintain developmental gain of children with Down's syndrome, to give help and training to their parents, to develop a transportable model, and to provide an exemplary demonstration program.

Children and parents participate in six programs: Infant Learning; Early, Intermediate, and Advanced Preschools; and Kindergarten and Primary. The Infant Learning Class provides individualized instruction in early motor and cognitive development for children from birth to 18 months of age. Parent and child come to the center for weekly 60-minute sessions. Training is also continued by parents in the home. Early and Intermediate Preschool and Kindergarten parents participate weekly as teacher's aides and data takers to learn techniques for maintaining the child's progress at home. The Down's Syndrome Performance Inventory is used as an assessment tool and guide for setting curriculum objectives. The skills are developmentally sequenced, and provide a record of the child's performance and progress.

(The Model Preschool Center for Handicapped Children was initially funded by OSE as a center with training, research, and service components. More recently its funding has been for outreach activities. The Center is affiliated with the Experimental Education Unit of the College of Education and the Child Development and Mental Retardation Center at the University of Washington, Seattle. Both Program for Children with Down's Syndrome and Communication Programs were developed by the Model Preschool Center for Handicapped Children.)

EVIDENCE OF EFFECTIVENESS: Data from testing with Down's Syndrome Performance Inventory, Denver Developmental Screening Test, Uniform Performance Assessment System, Gesell, Stanford-Binet, Peabody Vocabulary Test, and classroom observation show that children served in the Down's Syndrome Programs have met and are maintaining developmental and cognitive objectives. Children in the project and its replications do not show the usual downward curve in development of Down's syndrome children who do not receive early intervention services.

SCOPE OF IMPACT: The model has been selected for replication in Australia, Spain, Mexico, Israel and other countries as well as in 52 sites in the United States.

PROJECT: COMMUNICATION PROGRAMS

AGENCY: Model Preschool Center for Handicapped Children
University of Washington, Seattle, Washington

TARGET AUDIENCE: Approved by JDRP for children ages birth to 6 in early childhood programs with identified or suspected communication deficits (not related to current hearing loss).

DESCRIPTION: A program to help young children who have a variety of communication and language handicaps.

The Communication Programs serve classes of young children whose delays and disorders result from a variety of known and unknown etiologies frequently accompanied by other developmental lags or associated handicaps. The program offers training for classroom teachers and Communication Disorders Specialists (CDSs) in classroom management of communication behaviors. It also provides experience in team decision making. Teachers and/or parents are asked to identify their concerns about a child's communication ability or language skill. Assessment tools are used to support the concern and document the severity of the problem. Data taken during classroom activities provide supplementary information that is used in the planning of management strategies. Team members plan individualized programs for each child, arrange for implementation of these programs, and see that data are gathered. Individualized instruction essential to management of target behaviors is achieved by furthering communication skills in every activity of the school day. All language programs are related to the child's communication needs in the environment. Mutual decision making and implementation of programs immediately useful to the child are critical elements of the procedures. Personnel trained in this program have identified the following competencies as uniquely acquired at the training site: ability to identify language problems through classroom observation; ability to plan management strategies that can be implemented in the classroom; ability to arrive at decisions with members of a different discipline. The classrooms are staffed by teachers and Communication Disorders Specialists who work together. Teachers provide the basic programs that give the children opportunities to acquire and practice developmentally appropriate skills. In addition, they manage the day's activities so as to encourage communicative interaction and to provide opportunities for children to practice new language behaviors. The CDS assists the teacher in developing strategies to promote communication and plans and implements finely sequenced programs in a variety of language areas. Parents are an integral part of the team and are involved in the entire process from the time the first goals are established. They are invited to observe regularly and are involved in the home programs when appropriate.

(Communication Programs and Programs for Children with Down Syndrome were both developed by the Model Preschool Center for Handicapped Children, University of Washington, Seattle.)

EVIDENCE OF EFFECTIVENESS: Range of monthly gains in months for project students, 1973-74 -- Peabody Picture Vocabulary Test: 1.18-1.50; Sequenced Inventory of Communication and Language Development/Receptive Section: 1.30-1.86; SICLD/Expressive Section: 1.67-2.05.

SCOPE OF IMPACT: Parent involvement techniques have been developed to maximize child gains, with parents and other members of the interdisciplinary team coordinating efforts both at home and at school on behalf of the pupils.

At least forty sites are known to be using components of the demonstration model.

PROJECT: COMPREHENSIVE TRAINING PROGRAM FOR INFANT AND YOUNG CEREBRAL PALSIED CHILDREN (C.P. Project)

AGENCY: Demmer-Kiwanis Children's Division/Curative Rehabilitation Center
Wauwatosa, Wisconsin

TARGET AUDIENCE: Approved by JDRP for children three years of age or younger possessing a primary disability of moderate to severe neuromotor handicap with physical impairment of severe dimensions limiting motor activity, and the professionals who serve them.

DESCRIPTION: A program serving children three years of age and younger having a primary disability of moderate to severe neuromotor handicap with physical impairment severe enough to limit motor activity.

Children admitted to the Cerebral Palsy Project exhibit feeding, speech, and/or language problems. The children receive a panorama of services, including physical therapy, nutrition, psychological therapy, speech pathology, occupational therapy, special education, social service, and medical service. The primary focus of project activities is on two instructional programs, the Pre-Speech Program and the Language Stimulation Program. Parents take an active part in their children's therapy program, and they are involved through individual and group conferences with the project social worker.

To date, 56 agencies in the following states are replicating components of the program: Washington, Oregon, Illinois, Texas, Michigan, Ohio, New Hampshire, New York, Minnesota, Wisconsin, Arizona, California, Alabama, Pennsylvania, Iowa, Maryland, and Montana. Replicating agencies include school systems, rehabilitation centers, and hospitals serving children ages birth to three years. Three-member teams are trained from each agency in a six-day Fundamental Guidelines Course, and speech pathologists are trained in the use of the Pre-Speech Assessment Scale, which has been specially developed through this project.

EVIDENCE OF EFFECTIVENESS: Pre- and posttest data were analyzed using the Bzoch-League Receptive-Expressive Emergent Language Scale, Pre-School Language Scale, and Peabody Picture Vocabulary Test. The mean number of months gained on three of five instruments approaches that expected in normal growth (12 months' gain over 12 months). Data were collected for three years during demonstration project.

SCOPE OF IMPACT: The project has assisted 85 sites to replicate the model. Some of the sites are local education agencies. Of these sites, 75 are still in operation.

PROJECT: THE PORTAGE PROJECT: A Home Approach to the Early Education of Handicapped Children

AGENCY: Cooperative Educational Service #12; Portage, Wisconsin

TARGET AUDIENCE: Approved by JDRP for handicapped children, mental age 0-5, preschool programs, nonhandicapped Head Start home-based programs.

DESCRIPTION: A home-teaching program serving multicategorical handicapped children from birth to six years of age.

The Portage Project is financially supported by 23 local districts in south-central Wisconsin in cooperation with the Wisconsin Department of Public Instruction. The program provides a home teacher to each family each week to aid parents in assessing the child's present skill level in five developmental areas, targeting emerging skills, developing skills necessary to teach the child, defining appropriate teaching techniques, and evaluating the child's performance.

The program follows a precision teaching model and is based on the premise that effective parent involvement is the main ingredient in effective, long-term early childhood intervention. During the home visit, the home teacher demonstrates how the parent is to teach the child during the week, and baseline data are recorded. The parents then model the teaching process for the home teacher and a system for recording child performance is determined. Three or four prescriptions are left weekly, and parents teach the child daily and record the child's progress. On the following home visit, the home teacher records post-baseline data on each task that serve as the basis for weekly curriculum modification.

A new aspect of the project is the Portage Parent Program, a systematic parent-training component to improve parental skills in the teaching and child-management domains. During the regular home visit session, instruction is provided for the parent as well as for the child.

EVIDENCE OF EFFECTIVENESS: As measured by the Cattell Infant Test and Stanford-Binet, children in the project (mean I.Q. 75) gained 15 months in an eight month period. Another evaluation measure showed that greater gains were made by Portage Project children in mental age and in language, academic, and socialization skills than by children receiving only classroom instruction. The Portage Project has been replicated in approximately 30 sites. All have demonstrated similar gains.

SCOPE OF IMPACT: The Portage Project has obtained continuation funding from local schools and the State Department of Public Instruction. In 1980, the Project served 124 children, employed 20 teachers, and received financial support of \$274,639 for the services developed by the project. In addition, the Project has developed 70 replication sites during the outreach phase. Currently, these outreach sites are providing services for 1,008 children. Training has been requested and provided during outreach for 15,000 people, and from 10 to 15 requests for information are filled daily. Under the other funding the project has been replicated in a number of foreign countries and the materials translated into eight languages.

JDRP Approved Sites Visited

Two JDRP approved projects were randomly selected from the group of 21 HCEEP projects approved for dissemination by the JDRP. Site visits were made to the two projects. The site visits were made to obtain basic information. This included: 1) confirming that the model is functioning as described in Programs That Work (published by the NDN), 2) determining the number of children being served by continuation funds, and 3) observing the program in operation.

The two JDRP approved projects are located in the following states: Missouri and Utah. The following is a summary of the basic information obtained during the site visits.

The two projects are functioning according to the models described in Programs That Work. Table 41 presents a summary of the grants received from the HCEEP and other components of the Department of Education, by the two JDRP approved projects. This table is shown below.

Table 41

Grants Received From the HCEEP and Other Components
of the
Department of Education

<u>JDRP Approved Project</u>	<u>Demo. Grant</u>	<u>Outreach Grant</u>	<u>JDRP Approval</u>	<u>NDN Grant</u>
Site A	1970-1973	1973-1981	1977	1978-1981
Site B	1974-1977	1977-1979	1979	1979-1982

As shown in Table 41, both JDRP approved projects received outreach grants from the HCEEP. Also, both projects received grants from the NDN.

Table 42 presents a summary of basic facts about the programs operated by the two JDRP approved projects. This table is shown below.

Table 42

Basic Facts ABOUT Programs Operated by
Two JDRP Approved Projects

<u>JDRP Approved Projects</u>	<u>Ages of Children Served</u>	<u>No. of Children Served</u>
Site A	0 - 6	37
Site B	0 - 5	502

As shown in Table 42, the ages of the children served by the two JDRP approved projects range from 0 - 6. Also, the number of children served ranges from 37 to 502.

The on-site observations of the two JDRP projects in operation are

described briefly. These observations included the following types of activities:

- Speech therapy;
- Physical therapy;
- Recreational therapy; and,
- Group setting activity.

During the observations, several factors were noted. These included: the types of facilities and their location, the atmosphere in which children were observed, and the adequacy of space.

- The types of facilities observed were clinic and research buildings and a university-affiliated clinical setting.
- The atmosphere of facilities in which children were observed ranged from a simulated apartment setting complete with home furnishings to preschool classrooms.

In addition to the site visits, 5 replication sites listed by two JDRP approved projects were randomly selected and contacted (by telephone) to obtain information which included: 1) determining whether the replication sites consider themselves to be replications of the projects, 2) determining the number of children being served, and 3) determining the amount and sources of support.

The 5 replication projects are located in the following states: California, Nevada, Texas, Utah and Wyoming.

All 5 replication programs considered themselves replications of the JDRP approved projects. Table 43 (on the following page) presents a summary of the number of children served and the sources and amount of funds.

As shown in Table 43, the number of children served by the 5 replication programs range from 44-250. The sources of funding include donations, tuition, state and federal funding. The amount of funds available to the 5 replication programs range from \$13,000 to \$700,000.

5

Table 43

Children Served and Funding Sources of Replication Programs

<u>Number of Children Served</u>	<u>Funding Sources</u>	<u>Amount of Funds</u>
44	Tuition, donations	\$375,000.00
45	ACYF Grant.	\$112,000.00
163	Contributions, fund-raising, foundation support, endowment program, tuition	\$650 - 700,000.00
250	Headstart and Special Services/Handicap Grant	\$600,000.00
	Handicap Services to Home-based children	\$ 13,000.00
52	State - 70%	\$200,000.00
	Title I - 15%	
	Local Match - 15%	

CHAPTER SIX: SUMMARY AND CONCLUSIONS

A. Summary

The results of this study are summarized briefly. The major findings are:

- Projects have been active in every state and in several territories in urban and rural areas as specified by the legislation.
- Fifty-five percent (55%) of the children who leave HCEEP demonstration projects are placed in integrated settings with non-handicapped children which is less expensive than more specialized placements.
- Sixty-seven percent (67%) of the children who leave HCEEP demonstration projects perform in the average and above average range in relation to their peers, according to staff of the regular and special education programs to which they graduate.
- Eighty percent (80%) of the 280 projects are still continuing to serve children independent of HCEEP funding.
- More than 30,600 children have been served in continuation projects at no cost to the HCEEP.
- Extensive amounts of training have been requested and provided to personnel of other agencies.
- A total of 2,157 replications were identified; 1,991 as a result of outreach activities and 166 from projects in the demonstration phase.
- Replication programs are known to have served 107,850 children.
- For each child served directly in the demonstration projects, 6.4 children received services through continuation of demonstration projects and through replication of projects.
- For every HCEEP dollar expended in programming, \$18.37 has been generated in programming for children and their families.
- More than 3,000 products have been developed by HCEEP projects and widely disseminated, many through

commercial publishers.

- ° Twenty-one HCEEP projects have been approved for dissemination by the Joint Dissemination Review Panel of the Department of Education on the basis of evidence of effective programming and in cost of replication. Many other projects which have not applied for JDRP approval also have evidence of effective programming.

B. Conclusions

The results of this study show that funding 280 demonstration projects for a three-year period resulted in the provision of direct services for 21,000 young handicapped children and their families and the development of models which were voluntarily continued by state, local or other agencies or organizations at an unusually high rate. When the study was conducted in 1981, 80% of the projects were still in operation, despite the fact that the first of these projects began in 1969. These continuation projects served 30,600 children at no cost to the HCEEP and in many cases remained available as sites for demonstration and training. In addition, these demonstration projects stimulated 166 replications.

The study shows that the HCEEP's investment in 140 outreach projects to assist other agencies at their request to install or improve services based upon their original demonstration model resulted in 1,991 known replications serving 107,850 children. We have not been able to identify any other educational demonstration program which has resulted in this level of documented impact.

The findings show that the program's impact has been distributed geographically in both urban and rural areas as required by the legislation. Both demonstration and outreach activities have reached all the states and

most of the territories. An additional unexpected result has been the adoption of models developed by the program in many foreign countries, utilizing other sources of funding.

Three thousand products have been developed by demonstration and outreach programs. The materials developed by the projects have been widely used. The Chapel Hill Outreach Project (North Carolina) developed the Learning Accomplishment Profile (LAP) which has become the most widely used assessment instrument in Head Start. Chapel Hill Outreach Project has also been selected by the Kentucky State Department of Special Education to provide training in all 180 school districts in the use of the model. Kentucky elected to utilize its entire State Preschool Incentive Grant funding for this purpose and the Early Childhood Coordinator of the State Department has stated that it would not have been possible for the State to have made the progress it has in phasing in kindergarten programs which integrate handicapped children without the experienced assistance and prepared materials of the Chapel Hill Outreach Project.

Many materials have been developed in several languages, and are translated for use across the country and abroad. Materials developed by the Portage Project (Wisconsin), for example, have been translated into eight languages. The Chapel Hill and Portage projects are but two examples of large scale impact which went well beyond the original objectives of the project.

State and national impact of HCEEP programs has been both varied and extensive. The SKI*HI Project (Utah) provides an illustration of impact on other systems through its development of a statewide screening for newborns. This project, working in conjunction with the State Health Department,

produced a revised birth certificate format which includes high-risk indicators for hearing loss. It provides follow-up help through home visits to every infant in the state who is found to be at possible risk.

National impact is illustrated by the collaborative relationship of HCEEP and Head Start. Thirteen of the 15 RAPs, or Regional Access Projects, charged with locating appropriate special services for handicapped children within Head Start, are current or former HCEEP projects. The RAPs had a key role in enabling Head Start to fill 12% of its enrollment slots with children with diagnosed handicaps, a total of 45,430 children, in 1981. The two programs continue to cooperate in planning services and materials development and distribution.

One of the goals of the HCEEP has been to develop models for serving children and families--another has been to develop new ways to diffuse proven practices in other locations which desire to use the results of prior work. A number of working consortia have been developed. The Rural Network cooperates in disseminating information about each of the rural projects, for example. The results of this study show that impact has successfully crossed state and regional lines, so that an agency wishing to receive help in introducing proven practices rather than developing new practices can select and use a model developed anywhere in the country.

The accomplishments of the HCEEP projects as shown by the survey results are greater and more varied than for any other documented education program we have been able to identify. The site visits and telephone conversations our staff held with the directors and former staff of these projects show that much of the credit for this extensive impact of a comparatively modest

investment must be given to the creativity, dedication and hard work of the staffs of these early childhood projects and to the parents who work so closely with them.